182967

Access DB# [redacted]

SEARCH REQUEST FORM

Scientific and Technical Information Center

Requester's Full Name: SM J. Lee Examiner #: 7660 Date: 3-22-2006
Art Unit: 1752 Phone Number 30 2-1333 Serial Number: 10/743,441
Mail Box and Bldg/Room Location: 9D60 (Rem) Results Format Preferred (circle): PAPER DISK E-MAIL

If more than one search is submitted, please prioritize searches in order of need.

****

Please provide a detailed statement of the search topic, and describe as specifically as possible the subject matter to be searched. Include the elected species or structures, keywords, synonyms, acronyms, and registry numbers, and combine with the concept or utility of the invention. Define any terms that may have a special meaning. Give examples or relevant citations, authors, etc, if known. Please attach a copy of the cover sheet, pertinent claims, and abstract.

Title of Invention: Plz. see Bib

Inventors (please provide full names): _____

_____

Earliest Priority Filing Date: _____

***For Sequence Searches Only* Please include all pertinent information (parent, child, divisional, or issued patent numbers) along with the appropriate serial number.**

Please search for the invention of Cl. # 1

SCIENTIFIC REFERENCE BR
Sci. & Tech. Info. Ctr
MAR 2 3
Pat. & T M Office

****

STAFF USE ONLY	Type of Search	Vendors and cost where applicable
Searcher: KH	NA Sequence (#) _____	STN -$ 900,41
Searcher Phone #: _____	AA Sequence (#) _____	Dialog _____
Searcher Location: _____	Structure (#) 2	Questel/Orbit _____
Date Searcher Picked Up: _____	Bibliographic _____	Dr.Link _____
Date Completed: 3/23/06	Litigation _____	Lexis/Nexis _____
Searcher Prep & Review Time: 30	Fulltext _____	Sequence Systems _____
Clerical Prep Time: 30	Patent Family _____	WWW/Internet _____
Online Time: 195	Other _____	Other (specify) _____

PTO-1590 (8-01)

UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
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P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

BIBDATASHEET

CONFIRMATION NO. 1762

Bib Data Sheet

SERIAL NUMBER	FILING DATE	CLASS	GROUP ART UNIT	ATTORNEY DOCKET NO.
10/743,441	12/23/2003 RULE	430	1752	Q79134

APPLICANTS

Ikuo Kawauchi, Shizuoka, JAPAN;

Ippei Nakamura, Shizuoka, JAPAN;
Mitsumasa Tsuchiya, Shizuoka, JAPAN;

** CONTINUING DATA **********

None SJL

** FOREIGN APPLICATIONS **********

JAPAN P.2002-382231 12/27/2002
JAPAN P.2003-020750 01/29/2003) SJL

IF REQUIRED, FOREIGN FILING LICENSE GRANTED
** 04/03/2004

Foreign Priority claimed	STATE OR	SHEETS	TOTAL	INDEPENDENT
☑ yes ☐ no	COUNTRY	DRAWING	CLAIMS	CLAIMS
35 USC 119 (a-d) conditions met ☐ yes ☐ no ☐ Met after Allowance	JAPAN	0	5	1
Verified and Acknowledged Examiner's Signature Initials SJL				

ADDRESS
23373
SUGHRUE MION, PLLC
2100 PENNSYLVANIA AVENUE, N.W.
SUITE 800
WASHINGTON , DC
20037

TITLE
Heat-sensitive lithographic printing plate precursor

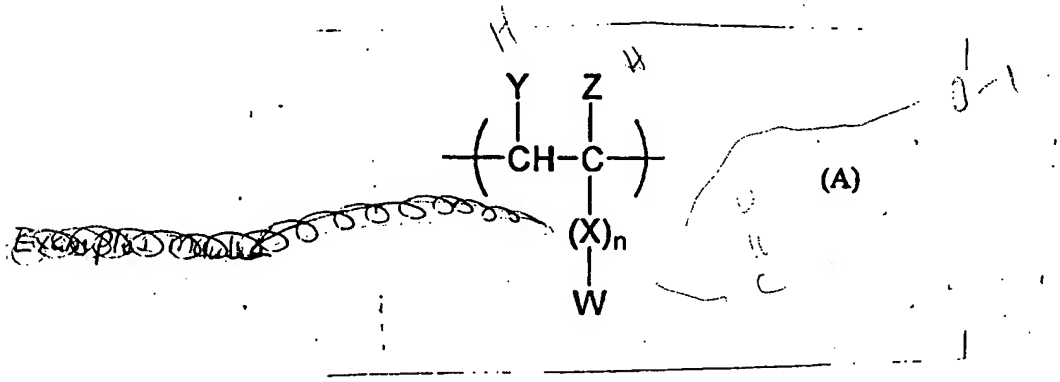
FILING FEE	FEES: Authority has been given in Paper No. _____ to charge/credit DEPOSIT ACCOUNT	☐ All Fees ☐ 1.16 Fees (Filing) ☐ 1.17 Fees (Processing Ext. of time)

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

LISTING OF CLAIMS:

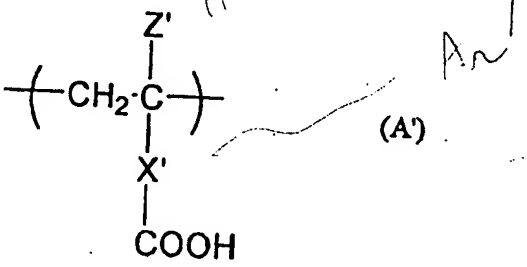
1. (currently amended): A heat-sensitive lithographic printing plate precursor comprising a support having thereon two image-forming layers each containing a polymer insoluble in water and soluble in an aqueous alkaline solution, wherein an upper layer of the image-forming layers contains a copolymer including a monomer unit represented by formula (A) shown below,



wherein W represents a carboxy group, X represents a divalent connecting group, Y represents a hydrogen atom or a carboxy group, Z represents a hydrogen atom, an alkyl group or a carboxy group, or W and Z or Y and Z may be combined with each other to from an acid anhydride group of –(CO)-O-(CO)-, and ~~mn~~ n represents 0 or 1.

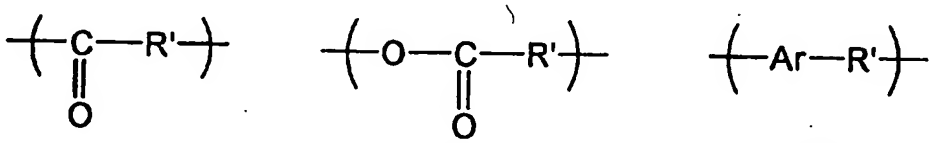
If you need examples for X, see cl. #2 (but it would be nice if you don't have to narrow the scope in #1

2. (original): The heat-sensitive lithographic printing plate precursor as claimed in Claim 1, wherein the monomer unit represented by formula (A) is a monomer unit represented by formula (A') shown below,



(A')

wherein Z' represents a hydrogen atom or an alkyl group, and X' represents an arylene group, which may have a substituent, or any one of the strictures represented by formulae (X1) to (X3) shown below,



(X1) (X2) (X3)

wherein Ar represents an arylene group, which may have a substituent, and R' represents a divalent connecting group.

3. (original): The heat-sensitive lithographic printing plate precursor as claimed in Claim 1, wherein the copolymer further contains a monomer unit derived from a monomer selected from a (meth)acrylate, a (meth)acrylamide derivative and a styrene derivative.

4. (original): The heat-sensitive lithographic printing plate precursor as claimed in Claim 1, wherein the upper layer of the image-forming layers further contains an infrared absorbing dye.

5. (original): The heat-sensitive lithographic printing plate precursor as claimed in Claim 1, wherein the upper layer of the image-forming layers further contains a dissolution inhibiting compound.

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=> d his

     (FILE 'HOME' ENTERED AT 08:23:10 ON 23 MAR 2006)

     FILE 'HCAPLUS' ENTERED AT 08:23:50 ON 23 MAR 2006
                E US20040137366/PN
L1            82 S KAWAUCHI I?/AU
L2          1971 S NAKAMURA I?/AU
L3          1749 S TSUCHIYA M?/AU
L4             4 S L1 AND L2 AND L3
L5          5651 S LITHOG?(3N)PRINT?(3N)PLATE
L6             3 S L5 AND L4
L7         22513 S HEAT?(3N)SENSITIV?
L8             0 S L7 AND L6
L9          3947 S (IR OR I()R OR INFRARED OR INFRA()RED)(2N)SENSITIV?
L10            2 S L6 AND L9
L11           11 S L1 AND L2
L12            6 S L1 AND L3
L13            6 S L2 AND L3
L14           15 S L11-L13
L15            9 S L14 AND L5
L16            2 S L15 AND L7
                 SEL RN

     FILE 'REGISTRY' ENTERED AT 08:39:58 ON 23 MAR 2006
L17           41 S E1-E41

     FILE 'HCAPLUS' ENTERED AT 08:44:40 ON 23 MAR 2006
                SEL RN L10

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L18           12 S E42-E53
L19            0 S L17 AND L18

     FILE 'LREGISTRY' ENTERED AT 09:07:19 ON 23 MAR 2006
L20               STR

     FILE 'REGISTRY' ENTERED AT 09:13:06 ON 23 MAR 2006
L21               SCR 2043
L22           50 S L20 AND L21
L23       188824 S L20 AND L21 FUL
                 SAV TEMP L23 LEE441/A

     FILE 'HCAPLUS' ENTERED AT 09:18:16 ON 23 MAR 2006
L24       289177 S L23
L25         1356 S L5 AND L24
L26          100 S L25 AND L7
L27        50232 S (WATER? OR H2O OR AQUEOUS)(2N)INSOL?
L28            9 S L26 AND L27
L29         5404 S ALKALIN?(3N)SOLUBLE
L30            0 S L29 AND L26
L31         6675 S ALKALINE?(5N)SOLUBLE
L32            1 S L31 AND L26
L33            0 S L32 AND L28
L34        14097 S LITHOG?(5N)PLATE
L35         8756 S LITHOG?(5N)PRINT?
L36        16562 S L34 OR L35 OR L5
L37          638 S L7 AND L36
L38          165 S L23 AND L37
L39        57182 S (WATER? OR H2O OR AQUEOUS)(5N)INSOL?
L40           11 S L38 AND L39
L41            3 S L38 AND L31
L42           14 S L40 OR L41
L43            0 S L40 AND L41
L44           14 S L28 OR L32 OR L40-L42
L45            0 S L44 AND (L4 OR L6 OR L14)
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L46       12438 S THERM?(3N)SENSITIV?
L47          97 S (L34 OR L35 OR L5) AND L46
L48          19 S L47 AND L24
L49          32 S L48 OR L44
L50           1 S L49 AND (L4 OR L6 OR L14)

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L51             STR L20

     FILE 'REGISTRY' ENTERED AT 10:47:00 ON 23 MAR 2006

     FILE 'LREGISTRY' ENTERED AT 10:48:23 ON 23 MAR 2006
L52             STR L51

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L53             STR L52

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     FILE 'REGISTRY' ENTERED AT 11:03:26 ON 23 MAR 2006
L55             STR L54

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     FILE 'LREGISTRY' ENTERED AT 11:05:50 ON 23 MAR 2006
L56             STR L55

     FILE 'REGISTRY' ENTERED AT 11:15:19 ON 23 MAR 2006
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                SAV TEMP L58 LEE441A/A

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L60        2886 S L59 AND (L5 OR L34 OR L35)
L61         133 S L60 AND (L7 OR L46)
L62         124 S L61 AND L7
L63         118 S L60 AND L39
L64          21 S L63 AND L31
L65          53 S L49 OR L64
L66          32 S L65 NOT L64
L67          53 S L65 AND 1840-2004/PY,PRY
L68          32 S L67 NOT L64

=> d que stat l49
L5         5651 SEA FILE=HCAPLUS ABB=ON  PLU=ON  LITHOG?(3A)PRINT?(3A)P
                LATE
L7        22513 SEA FILE=HCAPLUS ABB=ON  PLU=ON  HEAT?(3A)SENSITIV?
L20             STR
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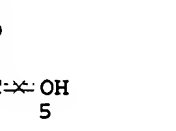


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REP G1=(0-1) A
NODE ATTRIBUTES:
DEFAULT MLEVEL IS ATOM
DEFAULT ECLEVEL IS LIMITED
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GRAPH ATTRIBUTES:
RING(S) ARE ISOLATED OR EMBEDDED
NUMBER OF NODES IS 6

STEREO ATTRIBUTES: NONE

L21		SCR 2043	
L23	188824	SEA FILE=REGISTRY SSS FUL L20 AND L21	
L24	289177	SEA FILE=HCAPLUS ABB=ON PLU=ON	L23
L25	1356	SEA FILE=HCAPLUS ABB=ON PLU=ON	L5 AND L24
L26	100	SEA FILE=HCAPLUS ABB=ON PLU=ON	L25 AND L7
L27	50232	SEA FILE=HCAPLUS ABB=ON PLU=ON	(WATER? OR H2O OR AQUEOUS)(2A)INSOL?
L28	9	SEA FILE=HCAPLUS ABB=ON PLU=ON	L26 AND L27
L31	6675	SEA FILE=HCAPLUS ABB=ON PLU=ON	ALKALINE?(5A)SOLUBLE
L32	1	SEA FILE=HCAPLUS ABB=ON PLU=ON	L31 AND L26
L34	14097	SEA FILE=HCAPLUS ABB=ON PLU=ON	LITHOG?(5A)PLATE
L35	8756	SEA FILE=HCAPLUS ABB=ON PLU=ON	LITHOG?(5A)PRINT?
L36	16562	SEA FILE=HCAPLUS ABB=ON PLU=ON	L34 OR L35 OR L5
L37	638	SEA FILE=HCAPLUS ABB=ON PLU=ON	L7 AND L36
L38	165	SEA FILE=HCAPLUS ABB=ON PLU=ON	L23 AND L37
L39	57182	SEA FILE=HCAPLUS ABB=ON PLU=ON	(WATER? OR H2O OR AQUEOUS)(5A)INSOL?
L40	11	SEA FILE=HCAPLUS ABB=ON PLU=ON	L38 AND L39
L41	3	SEA FILE=HCAPLUS ABB=ON PLU=ON	L38 AND L31
L42	14	SEA FILE=HCAPLUS ABB=ON PLU=ON	L40 OR L41
L44	14	SEA FILE=HCAPLUS ABB=ON PLU=ON	L28 OR L32 OR (L40 OR L41 OR L42)
L46	12438	SEA FILE=HCAPLUS ABB=ON PLU=ON	THERM?(3A)SENSITIV?
L47	97	SEA FILE=HCAPLUS ABB=ON PLU=ON	(L34 OR L35 OR L5) AND L46
L48	19	SEA FILE=HCAPLUS ABB=ON PLU=ON	L47 AND L24
L49	32	SEA FILE=HCAPLUS ABB=ON PLU=ON	L48 OR L44

=> d l49 1-32 ibib abs hitstr hitind

L49 ANSWER 1 OF 32 HCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2005:1005527 HCAPLUS
DOCUMENT NUMBER: 143:295665
TITLE: Heat-sensitive positive-working imaging materials containing specific polymer
INVENTOR(S): Watanabe, Kotaro; Nakamura, Ippei; Kawauchi, Ikuo; Hatanaka, Yusuke
PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 50 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2005250037	A2	20050915	JP 2004-59316	2004 0303
PRIORITY APPLN. INFO.:			JP 2004-59316	2004 0303

AB The title material has an underlayer containing a polymer and an IR-sensitive alkali-solubilizable imaging layer on a support, wherein the polymer has a reactive groups towards lone pair electrons, hydrogen bond-forming groups, a substituent forming ≥2 hydrogen bonds by heat, and a phenolic -OH group. The

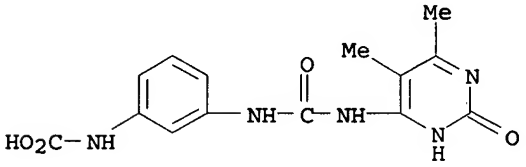
materials shows high solubility discrimination for image development and wide development latitude and are suitable mainly for **lithog. printing plates** of high **printing** durability and also for color proof, photoresists, color filters, etc.

IT **864407-21-6 864407-23-8**
RL: TEM (Technical or engineered material use); USES (Uses)
(Heat-sensitive pos.-working imaging materials containing specific polymer)

RN 864407-21-6 HCAPLUS
CN Formaldehyde, polymer with 4-(1,1-dimethylethyl)phenol and phenol, [3-[[[(1,2-dihydro-5,6-dimethyl-2-oxo-4-pyrimidinyl)amino]carbonyl]amino]phenyl]carbamate (9CI) (CA INDEX NAME)

CM 1

CRN 864407-20-5
CMF C14 H15 N5 O4

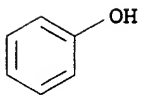


CM 2

CRN 28453-20-5
CMF (C10 H14 O . C6 H6 O . C H2 O)x
CCI PMS

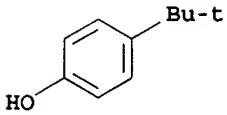
CM 3

CRN 108-95-2
CMF C6 H6 O



CM 4

CRN 98-54-4
CMF C10 H14 O



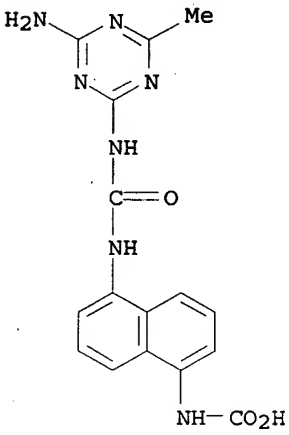
CM 5

CRN 50-00-0
CMF C H2 O

RN 864407-23-8 HCAPLUS
CN Formaldehyde, polymer with 2,5-dimethylphenol and phenol, [5-[[[(4-amino-6-methyl-1,3,5-triazin-2-yl)amino]carbonyl]amino]-2-naphthalenyl]carbamate (9CI) (CA INDEX NAME)

CM 1

CRN 864407-22-7
CMF C16 H15 N7 O3

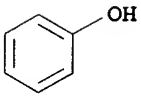


CM 2

CRN 56700-20-0
CMF (C8 H10 O . C6 H6 O . C H2 O)x
CCI PMS

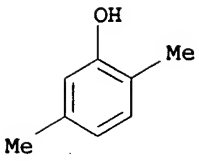
CM 3

CRN 108-95-2
CMF C6 H6 O



CM 4

CRN 95-87-4
CMF C8 H10 O



CM 5

CRN 50-00-0
CMF C H2 O

$H_2C{=}O$

IC ICM G03F007-11
ICS G03F007-00; G03F007-004
CC 74-6 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
Section cross-reference(s): 38
ST heat pos imaging polymer **lithog printing plate**
IT **Lithographic plates**
(Heat-sensitive pos.-working imaging materials containing specific polymer)
IT Imaging
(**thermal**; Heat-**sensitive** pos.-working imaging materials containing specific polymer)
IT 864407-15-8 864407-17-0 864407-19-2 **864407-21-6**
864407-23-8 864407-25-0 864407-27-2
RL: TEM (Technical or engineered material use); USES (Uses)
(Heat-sensitive pos.-working imaging materials containing specific polymer)

L49 ANSWER 2 OF 32 HCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2005:395212 HCAPLUS
DOCUMENT NUMBER: 142:454345
TITLE: Process for production of **heat-sensitive** imageable elements
INVENTOR(S): Savariar-Hauck, Celin; Hauck, Gerhard; Frank, Dietmar
PATENT ASSIGNEE(S): Kodak Polychrome Graphics GmbH, Germany
SOURCE: PCT Int. Appl., 36 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2005039878	A1	20050506	WO 2004-EP11379	2004 1011

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW

RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

DE 10347682 A1 20050609 DE 2003-10347682 2003 1014

PRIORITY APPLN. INFO.: DE 2003-10347682 A 2003 1014

OTHER SOURCE(S): MARPAT 142:454345

AB The invention relates to a process for the production of a **heat-sensitive** imageable element comprising: (a) providing a substrate, (b) applying a first coating solution, comprising at least one photothermal conversion material, at least one polymer A **soluble** or swellable in an aqueous **alkaline** developer and at least one solvent, (c) drying, (d) applying a second coating solution, comprising at least one cross-linkable polyfunctional enolether, at least one polymer B comprising hydroxy groups and/or carboxy groups, and at least one solvent, wherein the polymer used in the first coating solution does not dissolve in this solvent, wherein the second coating solution does not contain a photothermal conversion material, and (e) drying at a temperature of at least 60°C.

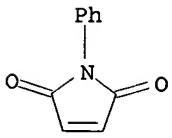
IT **321963-43-3**, Methacrylamide-methacrylic acid-N-phenylmaleimide copolymer
RL: EPR (Engineering process); NUU (Other use, unclassified); PEP (Physical, engineering or chemical process); PROC (Process); USES (Uses)
(process for production of **heat-sensitive** imageable elements)

RN 321963-43-3 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, polymer with 2-methyl-2-propenamide and 1-phenyl-1H-pyrrole-2,5-dione (9CI) (CA INDEX NAME)

CM 1

CRN 941-69-5
CMF C10 H7 N O2



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CRN 79-41-4
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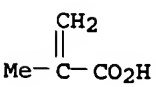
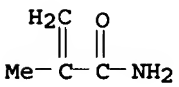


CM 3

CRN 79-39-0

CMF C4 H7 N O



IC ICM B41C001-10
ICS B41M005-36
CC 74-6 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
ST **heat sensitive** imageable element; IR absorber **lithog printing plate**
IT Optical materials
(IR absorbers; process for production of **heat-sensitive** imageable elements)
IT IR materials
(absorbers; process for production of **heat-sensitive** imageable elements)
IT Phenolic resins, processes
RL: EPR (Engineering process); NUU (Other use, unclassified); PEP (Physical, engineering or chemical process); PROC (Process); USES (Uses)
(novolak; process for production of **heat-sensitive** imageable elements)
IT Drying
Lithographic plates
(process for production of **heat-sensitive** imageable elements)
IT 27029-76-1, PD 140A 130066-57-8, VEctomer 4010 134127-48-3, Trump dye **321963-43-3**, Methacrylamide-methacrylic acid-N-phenylmaleimide copolymer
RL: EPR (Engineering process); NUU (Other use, unclassified); PEP (Physical, engineering or chemical process); PROC (Process); USES (Uses)
(process for production of **heat-sensitive** imageable elements)
REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L49 ANSWER 3 OF 32 HCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2005:231349 HCAPLUS
DOCUMENT NUMBER: 142:325957
TITLE: **Heat-sensitive** positive-working **lithographic printing plate** precursor
INVENTOR(S): Hauck, Gerhard; Frank, Dietmar
PATENT ASSIGNEE(S): Kodak Polychrome Graphics GmbH, Germany
SOURCE: Ger. Offen., 20 pp.
CODEN: GWXXBX
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 10337506	A1	20050317	DE 2003-10337506	2003 0814
PRIORITY APPLN. INFO.:			DE 2003-10337506	2003 0814

AB The **heat-sensitive** element comprises (A) a (pretreated) substrate, (B) a pos. working **heat-sensitive** coating layer comprising (i) at least 40 % of an aqueous alkali developer-soluble polymer, selected from novolak resins, functionalized novolak resins, polyvinylphenol resins, polyvinylcresols and poly(meth)acrylates with phenolic and/or sulfonamide side groups, (ii) 0.1-20 % of an **aqueous** alkali developer-**insol.** C4-20-alkylphenyl novolak resins, and (iii) optionally at least one further component selected from polymer particles, surfactants, dyes, and pigments to increase the color contrast, inorg. fillers, antioxidants, printout dyes, cellulose polymer carboxylic acid derivs., plasticizers, and substances, capable of converting 650-1300 nm light to heat.

IT **9004-38-0**, Cellulose acetate hydrogen phthalate
RL: TEM (Technical or engineered material use); USES (Uses)
(coating composition for **heat-sensitive** pos.-working **lithog. printing plate** precursor)

RN 9004-38-0 HCAPLUS

CN Cellulose, acetate hydrogen 1,2-benzenedicarboxylate (9CI) (CA INDEX NAME)

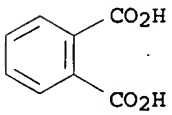
CM 1

CRN 9004-34-6
CMF Unspecified
CCI PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

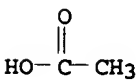
CM 2

CRN 88-99-3
CMF C8 H6 O4



CM 3

CRN 64-19-7
CMF C2 H4 O2



IC ICM G03F007-039
ICS G03F007-004

CC 74-6 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
Section cross-reference(s): 38

ST **heat sensitive** pos working **lithog printing plate** photothermal imaging

IT Photoimaging materials
(**heat-sensitive** pos.-working **lithog**. **printing plate plate** precursor)

IT Phenolic resins, uses
RL: TEM (Technical or engineered material use); USES (Uses)
(novolak; coating composition for **heat-sensitive** pos.-working **lithog. printing plate** **plate** precursor)
IT **Lithographic plates**
(presensitized; **heat-sensitive** pos.-working **lithog. printing plate** **plate** precursor)
IT 134127-48-3, Trump Dye
RL: TEM (Technical or engineered material use); USES (Uses)
(Trump Dye; coating composition for **heat-sensitive** pos.-working **lithog. printing plate** **plate** precursor)
IT 548-62-9, Crystal Violet **9004-38-0**, Cellulose acetate hydrogen phthalate 9016-83-5, PD 494A 9039-25-2, Bakelite 6564LB 25085-50-1, 6204K 26678-93-3, SP 1077 848044-72-4, Pro-Jet 825
RL: TEM (Technical or engineered material use); USES (Uses)
(coating composition for **heat-sensitive** pos.-working **lithog. printing plate** **plate** precursor)
REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L49 ANSWER 4 OF 32 HCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2004:1038492 HCAPLUS
DOCUMENT NUMBER: 142:45928
TITLE: Presensitized positive-working **lithographic plate** master showing excellent **printability** as well as smear resistance
INVENTOR(S): Takahashi, Miki; Sasaki, Hideto; Hotta, Hisashi
PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 51 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

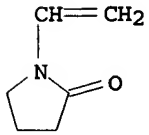
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2004341141	A2	20041202	JP 2003-136545	2003 0514
PRIORITY APPLN. INFO.:			JP 2003-136545	2003 0514

AB The title **lithog. plate** master includes an intermediate layer interposed between a hydrophilic support and a pos.-working **heat-sensitive** layer, wherein the intermediate layer contains a compound capable of interacting to a **water-insol.** alkali-soluble polymer. The compound is a polymer having a functional side chain(s) selected from -Y-Ar, -Y-(CnH2nO)m-R1, -Y-CO-NR3R2, and -Y-NR5-CO-R4 [Y = single bond, connection group; Ar = N-containing heteroaryl; R1-5 = H, C1-30-hydrocarbyl; m = 1-100; n ≥2].
IT **28062-44-4 604813-21-0 803729-44-4**
RL: DEV (Device component use); USES (Uses)
(in intermediate layer of presensitized pos.-working **lithog. plate** master showing excellent

printability as well as smear resistance)
RN 28062-44-4 HCAPLUS
CN 2-Propenoic acid, polymer with 1-ethenyl-2-pyrrolidinone (9CI) (CA INDEX NAME)

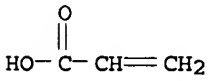
CM 1

CRN 88-12-0
CMF C6 H9 N O



CM 2

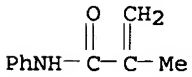
CRN 79-10-7
CMF C3 H4 O2



RN 604813-21-0 HCAPLUS
CN Benzoic acid, 4-ethenyl-, polymer with 2-methyl-N-phenyl-2-propenamide (9CI) (CA INDEX NAME)

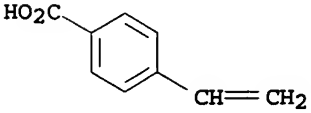
CM 1

CRN 1611-83-2
CMF C10 H11 N O



CM 2

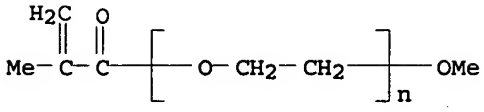
CRN 1075-49-6
CMF C9 H8 O2



RN 803729-44-4 HCAPLUS
CN Benzoic acid, 4-ethenyl-, polymer with α-(2-methyl-1-oxo-2-propenyl)-ω-methoxypoly(oxy-1,2-ethanediyl) (9CI) (CA INDEX NAME)

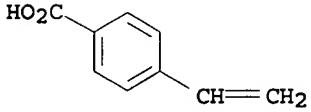
CM 1

CRN 26915-72-0
CMF (C2 H4 O)n C5 H8 O2
CCI PMS



CM 2

CRN 1075-49-6
CMF C9 H8 O2



IC ICM G03F007-11
ICS G03F007-00; G03F007-004
CC 74-6 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
ST **lithog plate** master presensitized pos working intermediate layer
IT **Lithographic plates**
(presensitized; presensitized pos.-working **lithog. plate** master showing excellent **printability** as well as smear resistance)
IT 9003-39-8 25232-41-1 **28062-44-4** 604813-21-0
803729-44-4 803729-45-5
RL: DEV (Device component use); USES (Uses)
(in intermediate layer of presensitized pos.-working **lithog. plate** master showing excellent **printability** as well as smear resistance)

L49 ANSWER 5 OF 32 HCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2004:1019607 HCAPLUS
DOCUMENT NUMBER: 142:30031
TITLE: **Thermally sensitive** printing plate
INVENTOR(S): Ray, Kevin Barry; Kitson, Anthony Paul; Kalamen, John
PATENT ASSIGNEE(S): USA
SOURCE: U.S. Pat. Appl. Publ., 14 pp., Cont.-in-part of U.S. Ser. No. 694,205.
CODEN: USXXCO
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2004234892	A1	20041125	US 2004-802533	2004 0317
US 2003077538	A1	20030424	US 2001-948182	2001

0907
US 6673514 B2 20040106
US 2004152010 A1 20040805 US 2003-694205
2003
1027
WO 2005090074 A1 20050929 WO 2005-US8408
2005
0314
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ,
CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG,
ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP,
KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD,
MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL,
PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN,
TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM,
ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH,
CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT,
LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF,
CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG
PRIORITY APPLN. INFO.: US 2001-948182 A1
2001
0907
US 2003-694205 A2
2003
1027
US 2004-802533 A
2004
0317

AB The present invention provides a printing plate imageable element including a substrate, a first layer applied to the substrate and a second layer applied to the first layer. The first layer may contain polymeric material and a radiation absorbing compound The second layer may contain a hydroxyl group-containing polymer that includes a heat-labile moiety such as tert-butoxy-carbonyl groups. The plates containing polymers functionalized with t-BOC groups show a beneficial combination of developer resistance and imaging properties.

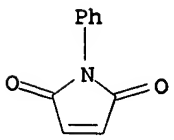
IT **321963-43-3**, Methacrylamide-methacrylic acid-N-phenylmaleimide copolymer
RL: TEM (Technical or engineered material use); USES (Uses)
(**thermally sensitive** printing plate)

RN 321963-43-3 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, polymer with 2-methyl-2-propenamide and 1-phenyl-1H-pyrrole-2,5-dione (9CI) (CA INDEX NAME)

CM 1

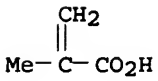
CRN 941-69-5
CMF C10 H7 N O2



CM 2

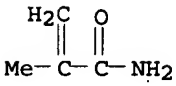
CRN 79-41-4

CMF C4 H6 O2



CM 3

CRN 79-39-0
CMF C4 H7 N O



IC ICM G03C001-73
INCL 430281100
CC 74-6 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
Section cross-reference(s): 38
ST pos **thermally sensitive** printing plate
IT Polyethers, uses
RL: TEM (Technical or engineered material use); USES (Uses)
(di-Me siloxane-, Byk 307; **thermally sensitive** printing plate)
IT Polysiloxanes, uses
RL: TEM (Technical or engineered material use); USES (Uses)
(di-Me, polyether-, Byk 307; **thermally sensitive** printing plate)
IT Lithographic plates
(presensitized, pos.-working; **thermally sensitive** printing plate)
IT 7429-90-5, Aluminum, uses 24979-70-2, Poly 4-hydroxystyrene 25086-36-6D, N-13, tert-butoxy-carbonyl reaction products 184348-71-8 **321963-43-3**, Methacrylamide-methacrylic acid-N-phenylmaleimide copolymer 586972-28-3, GP 649D99 799248-35-4
RL: TEM (Technical or engineered material use); USES (Uses)
(**thermally sensitive** printing plate)

L49 ANSWER 6 OF 32 HCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2004:822872 HCAPLUS
DOCUMENT NUMBER: 141:322632
TITLE: **Lithographic printing plate** precursor
INVENTOR(S): Maemoto, Kazuo; Hotta, Hisashi
PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan
SOURCE: Eur. Pat. Appl., 78 pp.
CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 3
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 1464514	A1	20041006	EP 2004-11700	2002 0723

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE,

MC, PT, IE, FI, CY, TR, BG, CZ, EE, SK

JP 2003034090	A2	20030204	JP 2001-221802	2001 0723
JP 2003034091	A2	20030204	JP 2001-221803	2001 0723
JP 2003063165	A2	20030305	JP 2001-256331	2001 0827
EP 1279520	A2	20030129	EP 2002-16280	2002 0723
EP 1279520	A3	20030618		

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, SK

PRIORITY APPLN. INFO.:	JP 2001-221802	A	2001 0723
	JP 2001-221803	A	2001 0723
	JP 2001-256331	A	2001 0827
	EP 2002-16280	A3	2002 0723

AB The invention concerns a **lithog. printing plate** precursor comprising an aluminum substrate, a lipophilic image-recording layer and an overcoat layer, the aluminum substrate being subjected to a surface-roughening treatment and having a hydrophilic film, the lipophilic image-recording layer not comprising a hydrophilic binder resin and comprising a hydrophobic polymer fine particle which can undergo combination by heat, a light-to-heat converting agent and a **water-insol.** compound having fluidity at 50°, and an overcoat layer comprising a water-soluble resin. The overcoat may contain ≥1 hydrophobic polymer fine particle which can undergo combination by heat and a microcapsule. The plates show reduced ablation and increased service life.

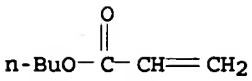
IT **25987-66-0P**, Butyl acrylate-methacrylic acid-methyl methacrylate-styrene copolymer **27923-68-8P**, Ethylene glycol-isophthalic acid-neopentyl glycol-terephthalic acid copolymer
RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(fine particles; **lithog. printing plate** precursor from roughened aluminum with **heat-sensitive** polymer particles and microcapsules in recording layer and overcoat)

RN 25987-66-0 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, polymer with butyl 2-propenoate, ethenylbenzene and methyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

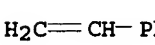
CM 1

CRN 141-32-2
CMF C7 H12 O2



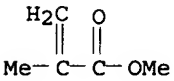
CM 2

CRN 100-42-5
CMF C8 H8



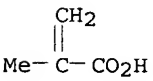
CM 3

CRN 80-62-6
CMF C5 H8 O2



CM 4

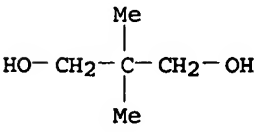
CRN 79-41-4
CMF C4 H6 O2



RN 27923-68-8 HCAPLUS
CN 1,3-Benzenedicarboxylic acid, polymer with 1,4-benzenedicarboxylic acid, 2,2-dimethyl-1,3-propanediol and 1,2-ethanediol (9CI) (CA INDEX NAME)

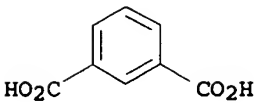
CM 1

CRN 126-30-7
CMF C5 H12 O2



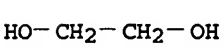
CM 2

CRN 121-91-5
CMF C8 H6 O4



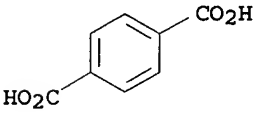
CM 3

CRN 107-21-1
CMF C2 H6 O2



CM 4

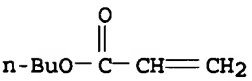
CRN 100-21-0
CMF C8 H6 O4



IT **25036-16-2P**, Butyl acrylate-methacrylic acid-styrene copolymer
RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(heat-fusible particles; **lithog. printing plate** precursor from roughened aluminum with **heat-sensitive** polymer particles and microcapsules in recording layer and overcoat)
RN 25036-16-2 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, polymer with butyl 2-propenoate and ethenylbenzene (9CI) (CA INDEX NAME)

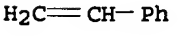
CM 1

CRN 141-32-2
CMF C7 H12 O2



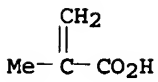
CM 2

CRN 100-42-5
CMF C8 H8



CM 3

CRN 79-41-4
CMF C4 H6 O2



IC ICM B41N003-03
ICS B41C001-10; C25F003-04
CC 74-6 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
Section cross-reference(s): 42
ST **lithog printing plate** precursor **heat sensitive** polymer particle microcapsule
IT Carbon black, uses
RL: TEM (Technical or engineered material use); USES (Uses)
(light-to-heat converting agent; **lithog. printing plate** precursor from roughened aluminum with **heat-sensitive** polymer particles and microcapsules in recording layer and overcoat)
IT **Lithographic plates**
(**lithog. printing plate** precursor from roughened aluminum with **heat-sensitive** polymer particles and microcapsules in recording layer and overcoat)
IT 1344-09-8, Sodium silicate
RL: NUU (Other use, unclassified); USES (Uses)
(aluminum hydrophilic treatment by; **lithog. printing plate** precursor from roughened aluminum with **heat-sensitive** polymer particles and microcapsules in recording layer and overcoat)
IT 7631-86-9, Snowtex ST-N, uses
RL: NUU (Other use, unclassified); USES (Uses)
(colloidal, aluminum hydrophilic treatment by; **lithog. printing plate** precursor from roughened aluminum with **heat-sensitive** polymer particles and microcapsules in recording layer and overcoat)
IT 25167-42-4P, Glycidyl methacrylate-styrene copolymer **25987-66-0P**, Butyl acrylate-methacrylic acid-methyl methacrylate-styrene copolymer **27923-68-8P**, Ethylene glycol-isophthalic acid-neopentyl glycol-terephthalic acid copolymer 252305-98-9P, Burnock DN-980-2,2-bis(hydroxymethyl)propionic acid copolymer
RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(fine particles; **lithog. printing plate** precursor from roughened aluminum with **heat-sensitive** polymer particles and microcapsules in recording layer and overcoat)
IT 9003-53-6P, Polystyrene **25036-16-2P**, Butyl acrylate-methacrylic acid-styrene copolymer 39366-01-3P, Polycresol
RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(heat-fusible particles; **lithog. printing plate** precursor from roughened aluminum with **heat-sensitive** polymer particles and microcapsules in recording layer and overcoat)
IT 134127-48-3 172616-80-7 289893-03-4 421556-83-4
RL: TEM (Technical or engineered material use); USES (Uses)
(light-to-heat converting agent; **lithog. printing plate** precursor from roughened aluminum with **heat-sensitive** polymer

particles and microcapsules in recording layer and overcoat)
IT 113923-32-3P 160536-34-5P 769135-47-9P 769135-48-0P
RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(microcapsules containing; **lithog. printing plate** precursor from roughened aluminum with **heat-sensitive** polymer particles and microcapsules in recording layer and overcoat)
IT 7429-90-5, Aluminum, processes
RL: PEP (Physical, engineering or chemical process); PYP (Physical process); TEM (Technical or engineered material use); PROC (Process); USES (Uses)
(surface roughened; **lithog. printing plate** precursor from roughened aluminum with **heat-sensitive** polymer particles and microcapsules in recording layer and overcoat)

L49 ANSWER 7 OF 32 HCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2004:822871 HCAPLUS
DOCUMENT NUMBER: 141:322631
TITLE: **Lithographic printing plate** precursor
INVENTOR(S): Maemoto, Kazuo; Hotta, Hisashi
PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan
SOURCE: Eur. Pat. Appl., 82 pp.
CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 3
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 1464513	A1	20041006	EP 2004-11675	2004 0517
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI, CY, TR, BG, CZ, EE, SK				
JP 2003034090	A2	20030204	JP 2001-221802	2001 0723
JP 2003034091	A2	20030204	JP 2001-221803	2001 0723
JP 2003063165	A2	20030305	JP 2001-256331	2001 0827
EP 1279520	A2	20030129	EP 2002-16280	2002 0723
EP 1279520	A3	20030618		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, SK				
EP 1586461	A1	20051019	EP 2005-13885	2002 0723
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI, CY, TR, BG, CZ, EE, SK				
EP 1593522	A1	20051109	EP 2005-13893	2002 0723
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI, CY, TR, BG, CZ, EE, SK				

PRIORITY APPLN. INFO.: JP 2001-221802 A

		2001 0723
JP 2001-221803	A	2001 0723
JP 2001-256331	A	2001 0827
EP 2002-16280	A3	2002 0723
EP 2004-11675	A3	2004 0517

AB The invention concerns a **lithog. printing plate** precursor which does not require development and comprises an aluminum substrate, an image-recording layer and a hydrophilic film, and optionally an overcoat layer. The aluminum substrate is electrochem. surface-roughened in aqueous HCl solution and is provided with a hydrophilic film having d. 1,000-3,200 kg/m3 and/or porosity 20-70%. Alternatively, the Al substrate has a surface-roughened shape with small pits; the average opening size of the small pits is 0.01-3 m and the ratio of the average depth of the small pit to the average opening size is 0.1-0.5. The image-recording layer comprises ≥2 types of fine particles selected from heat-fusible fine particles, polymer fine particles with a heat-reactive functional group, and a microcapsule containing a heat-reactive compound; ≥1 of the fine particles combines by heat to form an image. Alternatively this layer contains self water-dispersible resin fine particles which combine by heat, and the layer is writable by IR laser exposure. When the overcoat layer comprising a water-soluble resin is present, the image recording layer does not contain a hydrophilic binder resin, but does contain a hydrophobic polymer heat-combinable fine particle, a light-to-heat converting agent and a **water-insol.** compound with fluidity at 50°. The overcoat layer may contain a hydrophobic polymer fine particles and/or microcapsules; it may also contain a light-to-heat converting agent and have an optical d. at the exposure wavelength that is lower than that of the image recording layer. Printing plates of the invention prevent ablation and have increased printing durability.

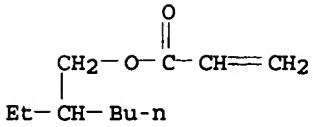
IT **25085-19-2P**, Acrylic acid-2-ethylhexyl acrylate-styrene copolymer **27923-68-8P**, Ethylene glycol/isophthalic acid/neopentyl glycol/terephthalic acid copolymer
RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(fine particles; **lithog. printing plate** precursor from roughened aluminum with **heat-sensitive** polymer particles and microcapsules in recording layer and overcoat)

RN 25085-19-2 HCAPLUS

CN 2-Propenoic acid, polymer with ethenylbenzene and 2-ethylhexyl 2-propenoate (9CI) (CA INDEX NAME)

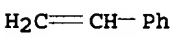
CM 1

CRN 103-11-7
CMF C11 H20 O2



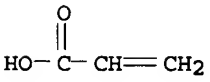
CM 2

CRN 100-42-5
CMF C8 H8



CM 3

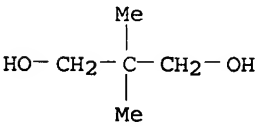
CRN 79-10-7
CMF C3 H4 O2



RN 27923-68-8 HCAPLUS
CN 1,3-Benzenedicarboxylic acid, polymer with 1,4-benzenedicarboxylic acid, 2,2-dimethyl-1,3-propanediol and 1,2-ethanediol (9CI) (CA INDEX NAME)

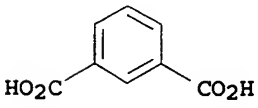
CM 1

CRN 126-30-7
CMF C5 H12 O2



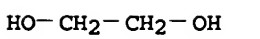
CM 2

CRN 121-91-5
CMF C8 H6 O4



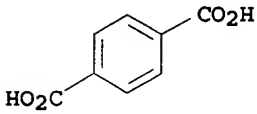
CM 3

CRN 107-21-1
CMF C2 H6 O2



CM 4

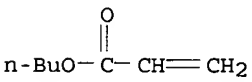
CRN 100-21-0
CMF C8 H6 O4



IT **25036-16-2P**, Butyl acrylate-methacrylic acid-styrene copolymer
RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(heat-fusible particles; **lithog. printing plate** precursor from roughened aluminum with **heat-sensitive** polymer particles and microcapsules in recording layer and overcoat)
RN 25036-16-2 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, polymer with butyl 2-propenoate and ethenylbenzene (9CI) (CA INDEX NAME)

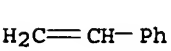
CM 1

CRN 141-32-2
CMF C7 H12 O2



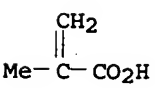
CM 2

CRN 100-42-5
CMF C8 H8



CM 3

CRN 79-41-4
CMF C4 H6 O2



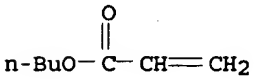
IT **25987-66-0P**, Butyl acrylate-methacrylic acid-methyl methacrylate-styrene copolymer
RL: IMF (Industrial manufacture); TEM (Technical or engineered

material use); PREP (Preparation); USES (Uses)
(self water-dispersible fine particles; **lithog. printing plate** precursor from roughened aluminum with **heat-sensitive** polymer particles and microcapsules in recording layer and overcoat)

RN 25987-66-0 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, polymer with butyl 2-propenoate, ethenylbenzene and methyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

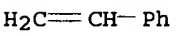
CM 1

CRN 141-32-2
CMF C7 H12 O2



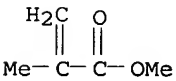
CM 2

CRN 100-42-5
CMF C8 H8



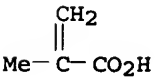
CM 3

CRN 80-62-6
CMF C5 H8 O2



CM 4

CRN 79-41-4
CMF C4 H6 O2



IC ICM B41N003-03
ICS B41C001-10; C25F003-04
CC 74-6 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
Section cross-reference(s): 42
ST **lithog printing plate** precursor **heat sensitive** polymer particle microcapsule
IT Carbon black, uses
RL: TEM (Technical or engineered material use); USES (Uses)
(light-to-heat converting agent; **lithog. printing plate** precursor from roughened

aluminum with **heat-sensitive** polymer particles and microcapsules in recording layer and overcoat)

IT **Lithographic plates**
(**lithog. printing plate** precursor from roughened aluminum with **heat-sensitive** polymer particles and microcapsules in recording layer and overcoat)

IT 1344-09-8, Sodium silicate
RL: NUU (Other use, unclassified); USES (Uses)
(aluminum hydrophilic treatment with; **lithog. printing plate** precursor from roughened aluminum with **heat-sensitive** polymer particles and microcapsules in recording layer and overcoat)

IT 7631-86-9, Snowtex ST-N, uses
RL: NUU (Other use, unclassified); USES (Uses)
(colloidal, aluminum hydrophilic treatment with; **lithog. printing plate** precursor from roughened aluminum with **heat-sensitive** polymer particles and microcapsules in recording layer and overcoat)

IT **25085-19-2P**, Acrylic acid-2-ethylhexyl acrylate-styrene copolymer **27923-68-8P**, Ethylene glycol/isophthalic acid/neopentyl glycol/terephthalic acid copolymer 39366-01-3P, Polycresol 252305-98-9P, Burnock DN 980-2,2-bis(hydroxymethyl)propionic acid copolymer
RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(fine particles; **lithog. printing plate** precursor from roughened aluminum with **heat-sensitive** polymer particles and microcapsules in recording layer and overcoat)

IT 9003-53-6P, Polystyrene **25036-16-2P**, Butyl acrylate-methacrylic acid-styrene copolymer
RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(heat-fusible particles; **lithog. printing plate** precursor from roughened aluminum with **heat-sensitive** polymer particles and microcapsules in recording layer and overcoat)

IT 134127-48-3 172616-80-7 289893-03-4 421556-83-4
RL: TEM (Technical or engineered material use); USES (Uses)
(light-to-heat converting agent; **lithog. printing plate** precursor from roughened aluminum with **heat-sensitive** polymer particles and microcapsules in recording layer and overcoat)

IT 113923-32-3P, Bisphenol a/epichlorohydrin/trimethylolpropane xylylene diisocyanate adduct (1:3) copolymer 160536-34-5P, D-110N-Epikote 1001 copolymer 769135-47-9P, Bisphenol A-Takenate D 110N-hydroquinone bis(2-hydroxyethyl)ether copolymer 769135-48-0P, Bisphenol A-hydroquinone bis(2-hydroxyethyl)ether trimethylolpropane xylylene diisocyanate adduct copolymer
RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(microcapsules containing; **lithog. printing plate** precursor from roughened aluminum with **heat-sensitive** polymer particles and microcapsules in recording layer and overcoat)

IT 25167-42-4P, Glycidyl methacrylate-styrene copolymer
RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(particles; **lithog. printing plate** precursor from roughened aluminum with **heat-sensitive** polymer particles and microcapsules in recording layer and overcoat)

IT **25987-66-0P**, Butyl acrylate-methacrylic acid-methyl methacrylate-styrene copolymer
RL: IMF (Industrial manufacture); TEM (Technical or engineered

material use); PREP (Preparation); USES (Uses)
(self water-dispersible fine particles; **lithog. printing plate** precursor from roughened aluminum with **heat-sensitive** polymer particles and microcapsules in recording layer and overcoat)

IT 7429-90-5, Aluminum, processes
RL: PEP (Physical, engineering or chemical process); PYP (Physical process); TEM (Technical or engineered material use); PROC (Process); USES (Uses)
(surface roughened; **lithog. printing plate** precursor from roughened aluminum with **heat-sensitive** polymer particles and microcapsules in recording layer and overcoat)

IT 7647-01-0, Hydrochloric acid, uses
RL: NUU (Other use, unclassified); USES (Uses)
(surface roughening with; **lithog. printing plate** precursor from roughened aluminum with **heat-sensitive** polymer particles and microcapsules in recording layer and overcoat)

L49 ANSWER 8 OF 32 HCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2004:801659 HCAPLUS
DOCUMENT NUMBER: 141:304335
TITLE: Original **plate** of **lithographic printing plate**
INVENTOR(S): Aogo, Toshiaki
PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 28 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2004272058	A2	20040930	JP 2003-64761	2003 0311

PRIORITY APPLN. INFO.: JP 2003-64761 2003 0311

OTHER SOURCE(S): MARPAT 141:304335
AB The invention is concerned about an original **plate** for making IR laser pos. **lithog. printing plate** using direct **plate**-making method. The plate comprises, on a support having a hydrophilic surface, a **heat-sensitive** layer containing (A) a **water -insol.** alkali soluble resin, (B) an IR-absorbing dye, and (C) a cyclodextrin derivative The **heat-sensitive** layer has an increased solubility in aqueous alkali solution upon IR exposure.

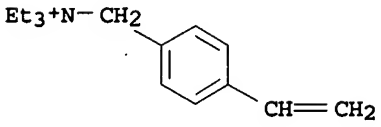
IT **220227-02-1**
RL: TEM (Technical or engineered material use); USES (Uses)
(substrate surface coating; original **plate** of **lithog. printing plate** containing cyclodextrin derivs.)

RN 220227-02-1 HCAPLUS
CN Benzenemethanaminium, 4-ethenyl-N,N,N-triethyl-, chloride, polymer with 4-ethenylbenzoic acid (9CI) (CA INDEX NAME)

CM 1

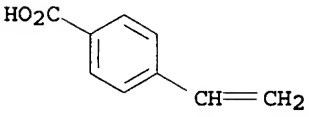
CRN 14350-43-7

CMF C15 H24 N . Cl



CM 2

CRN 1075-49-6
CMF C9 H8 O2



IC ICM G03F007-004
ICS G03F007-00; G03F007-11
CC 74-6 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
ST original **plate lithog printing** cyclodextrin deriv
IT Phenolic resins, uses
RL: POF (Polymer in formulation); TEM (Technical or engineered material use); USES (Uses)
(novolak; original **plate** of **lithog. printing plate** containing cyclodextrin derivs.)
IT **Lithographic plates**
(original **plate** of **lithog. printing plate** containing cyclodextrin derivs.)
IT 7585-39-9D, β-Cyclodextrin, methylated 17465-86-0D, γ-Cyclodextrin, methylated
RL: MOA (Modifier or additive use); USES (Uses)
(original **plate** of **lithog. printing plate** containing cyclodextrin derivs.)
IT 27029-76-1 141634-00-6
RL: POF (Polymer in formulation); TEM (Technical or engineered material use); USES (Uses)
(original **plate** of **lithog. printing plate** containing cyclodextrin derivs.)
IT 134127-48-3
RL: TEM (Technical or engineered material use); USES (Uses)
(original **plate** of **lithog. printing plate** containing cyclodextrin derivs.)
IT **220227-02-1**
RL: TEM (Technical or engineered material use); USES (Uses)
(substrate surface coating; original **plate** of **lithog. printing plate** containing cyclodextrin derivs.)

L49 ANSWER 9 OF 32 HCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2004:720340 HCAPLUS
DOCUMENT NUMBER: 141:233249
TITLE: **Heat-sensitive**

lithographic plates capable of direct platemaking by digital data-based scanning exposure

INVENTOR(S): Nagashima, Akira
PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 44 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2004246051	A2	20040902	JP 2003-35455	2003 0213

PRIORITY APPLN. INFO.: JP 2003-35455 2003 0213

AB The plates have, on hydrophilic supports, layers containing (A) **water-insol.** and alkali-soluble vinyl polymers prepared from alkali-soluble monomers H2C:CR1COX1R2Y1nZ1m [Z1 = O, NR3; R1 = H, Me; R2 = single bond, bivalent organic group; Y1 = arylene; Z1 = OH, CO2H, SO2NHR4; NHSO2R5, etc.; n = 0, 1; m ≥1; R3 = H, C1-12 (cyclo)alkyl, aryl, aralkyl; R4 = H, C1-12 alkyl, etc.; R5 = C1-12 alkyl, etc.] and oxyalkylene chain-bearing (meth)acrylates and (B) IR absorbers. The plates may have bilayer imaging layers consisting of lower layers containing the above vinyl polymers and upper layers containing alkali-soluble resins and development inhibitors and contain IR absorbers in the lower and/or the upper layers.

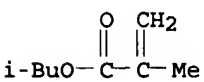
IT **80570-62-3**, Acrylic acid-ethyl methacrylate-isobutyl methacrylate copolymer
RL: TEM (Technical or engineered material use); USES (Uses)
(upper imaging layers; photothermal converting presensitized **lithog. plates** containing oxyalkylene unit-containing vinyl polymers for CTP platemaking)

RN 80570-62-3 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, ethyl ester, polymer with 2-methylpropyl 2-methyl-2-propenoate and 2-propenoic acid (9CI) (CA INDEX NAME)

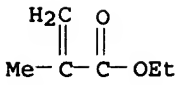
CM 1

CRN 97-86-9
CMF C8 H14 O2



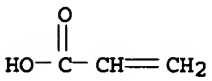
CM 2

CRN 97-63-2
CMF C6 H10 O2



CM 3

CRN 79-10-7
CMF C3 H4 O2



IC ICM G03F007-033
ICS G03F007-00; G03F007-004; G03F007-11
CC 74-6 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
Section cross-reference(s): 38
ST presensitized lithog direct platemaking digital scanning; **heat sensitive** PS oxyalkylene methacrylate vinyl polymer; tetraethylene glycol methacrylate polymer PS platemaking; photothermal converting presensitized **lithog** platemaking **printing** durability
IT Dyes
(IR-absorbing, cyanine dyes; photothermal converting presensitized **lithog. plates** containing oxyalkylene unit-containing vinyl polymers for CTP platemaking)
IT Phenolic resins, uses
RL: TEM (Technical or engineered material use); USES (Uses)
(novolak, cresol-based, upper imaging layers; photothermal converting presensitized **lithog. plates** containing oxyalkylene unit-containing vinyl polymers for CTP platemaking)
IT **Lithographic plates**
(presensitized; photothermal converting presensitized **lithog. plates** containing oxyalkylene unit-containing vinyl polymers for CTP platemaking)
IT 11146-28-4 37321-70-3, JIS A 1050
RL: TEM (Technical or engineered material use); USES (Uses)
(anodized, supports; photothermal converting presensitized **lithog. plates** containing oxyalkylene unit-containing vinyl polymers for CTP platemaking)
IT 80-09-1
RL: MOA (Modifier or additive use); TEM (Technical or engineered material use); USES (Uses)
(development inhibitors; photothermal converting presensitized **lithog. plates** containing oxyalkylene unit-containing vinyl polymers for CTP platemaking)
IT 410100-15-1P
RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(lower imaging layers; photothermal converting presensitized **lithog. plates** containing oxyalkylene unit-containing vinyl polymers for CTP platemaking)
IT 410100-17-3P 410100-19-5P 746676-60-8P 746676-61-9P 748133-46-2P
RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(lower recording layers; photothermal converting presensitized **lithog. plates** containing oxyalkylene unit-containing vinyl polymers for CTP platemaking)

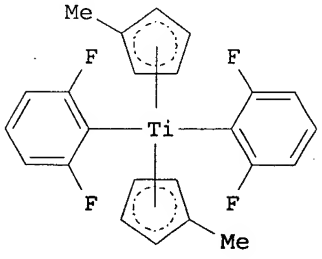
IT 23578-73-6 27029-76-1, m-Cresol-p-cresol-formaldehyde copolymer
80570-62-3, Acrylic acid-ethyl methacrylate-isobutyl methacrylate copolymer
RL: TEM (Technical or engineered material use); USES (Uses)
(upper imaging layers; photothermal converting presensitized **lithog. plates** containing oxyalkylene unit-containing vinyl polymers for CTP platemaking)

L49 ANSWER 10 OF 32 HCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2004:391617 HCAPLUS
DOCUMENT NUMBER: 140:414959
TITLE: Presensitized **lithographic plates** showing good thermal-shock stability of photosensitivity and compositions therefor
INVENTOR(S): Matsumura, Tomoyuki
PATENT ASSIGNEE(S): Konica Minolta Holdings Inc., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 28 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

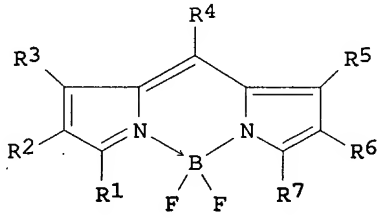
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2004138875	A2	20040513	JP 2002-304257	2002 1018

PRIORITY APPLN. INFO.: JP 2002-304257 2002 1018

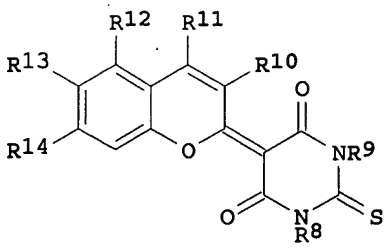
OTHER SOURCE(S): MARPAT 140:414959
GI



I



II



III

AB The compns. comprise (A) photopolymn. initiator compns. containing titanocene compound I and dyes chosen from II [R1-R7 = H, alkyl,

acyl(alkyl), acyloxyalkyl, alkoxyalkyl, cyano], III [R8, R9 = (substituted) alkyl; R10, R11 = H, alkyl, CH(3-n)Xn; X = halo; n = 0-3; R12-R14 = H, (substituted) alkyl or aryl, (alkyl)amino, dialkylamino; R11 and R12 may form ring], and/or IV [R15-R18 = H, halo; R19 = H, (substituted) alkyl; M = H, alkali metal], (B) ethylenic double bond-containing monomers capable of addition polymerization, and (C) macromol. binders. Photosensitive **lithog. plates** having the compns. on hydrophilic surfaces of substrates are useful for CTP (computer-to-plate) system.

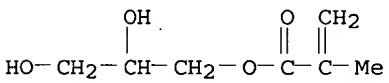
IT **280776-33-2P**, Acrylonitrile-ethyl methacrylate-methacrylic acid-methyl methacrylate copolymer glycidyl methacrylate ester
RL: IMF (Industrial manufacture); RCT (Reactant); TEM (Technical or engineered material use); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)
(presensitized **lithog. plates** containing titanocene photopolymn. initiators and photosensitizing dyes showing **thermal** shock-resistant **sensitivity**
)

RN 280776-33-2 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, polymer with ethyl 2-methyl-2-propenoate, methyl 2-methyl-2-propenoate and 2-propenenitrile, 2-hydroxy-3-[(2-methyl-1-oxo-2-propenyl)oxy]propyl ester (9CI) (CA INDEX NAME)

CM 1

CRN 5919-74-4
CMF C7 H12 O4

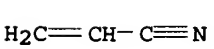


CM 2

CRN 102772-82-7
CMF (C6 H10 O2 . C5 H8 O2 . C4 H6 O2 . C3 H3 N)x
CCI PMS

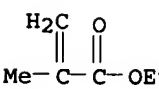
CM 3

CRN 107-13-1
CMF C3 H3 N



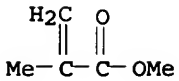
CM 4

CRN 97-63-2
CMF C6 H10 O2



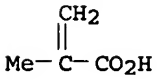
CM 5

CRN 80-62-6
CMF C5 H8 O2



CM 6

CRN 79-41-4
CMF C4 H6 O2



IC ICM G03F007-029
ICS G03F007-00; G03F007-031
CC 74-6 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
Section cross-reference(s): 35, 38
ST presensitized **lithog plate** thermal shock stability; titanocene photopolymn initiator photosensitizer dye lithog sensitivity; acrylic photoimaging stable photosensitivity **lithog plate**
IT Polyamides, preparation
RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(acrylic; presensitized **lithog. plates** containing titanocene photopolymn. initiators and photosensitizing dyes showing **thermal** shock-resistant **sensitivity**)
IT Photoimaging materials
(photopolymerizable; presensitized **lithog. plates** containing titanocene photopolymn. initiators and photosensitizing dyes showing **thermal** shock-resistant **sensitivity**)
IT Polymerization catalysts
(photopolymn.; presensitized **lithog. plates** containing titanocene photopolymn. initiators and photosensitizing dyes showing **thermal** shock-resistant **sensitivity**)
IT Dyes
(photosensitizing; presensitized **lithog. plates** containing titanocene photopolymn. initiators and photosensitizing dyes showing **thermal** shock-resistant **sensitivity**)
IT **Lithographic plates**
(presensitized; presensitized **lithog. plates** containing titanocene photopolymn. initiators and photosensitizing dyes showing **thermal** shock-resistant **sensitivity**)
IT 91105-84-9, NK Oligo U 4HA
RL: RCT (Reactant); TEM (Technical or engineered material use); RACT (Reactant or reagent); USES (Uses)
(NK Oligo U 4HA; presensitized **lithog. plates** containing titanocene photopolymn. initiators and photosensitizing dyes showing **thermal** shock-resistant **sensitivity**)
IT 123968-25-2
RL: RCT (Reactant); TEM (Technical or engineered material use);

RACT (Reactant or reagent); USES (Uses)
(Sumilizer GS; presensitized **lithog. plates** containing titanocene photopolymn. initiators and photosensitizing dyes showing **thermal** shock-resistant **sensitivity**)

IT 93709-39-8
RL: CAT (Catalyst use); TEM (Technical or engineered material use); USES (Uses)
(photopolymn. initiators; presensitized **lithog. plates** containing titanocene photopolymn. initiators and photosensitizing dyes showing **thermal** shock-resistant **sensitivity**)

IT 6359-05-3 118234-41-6 137829-79-9 151486-56-5 685898-80-0 685898-81-1 686304-98-3
RL: CAT (Catalyst use); TEM (Technical or engineered material use); USES (Uses)
(photosensitive dyes; presensitized **lithog. plates** containing titanocene photopolymn. initiators and photosensitizing dyes showing **thermal** shock-resistant **sensitivity**)

IT **280776-33-2P**, Acrylonitrile-ethyl methacrylate-methacrylic acid-methyl methacrylate copolymer glycidyl methacrylate ester
RL: IMF (Industrial manufacture); RCT (Reactant); TEM (Technical or engineered material use); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)
(presensitized **lithog. plates** containing titanocene photopolymn. initiators and photosensitizing dyes showing **thermal** shock-resistant **sensitivity**
)

IT 685898-82-2
RL: RCT (Reactant); TEM (Technical or engineered material use); RACT (Reactant or reagent); USES (Uses)
(presensitized **lithog. plates** containing titanocene photopolymn. initiators and photosensitizing dyes showing **thermal** shock-resistant **sensitivity**
)

L49 ANSWER 11 OF 32 HCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2004:291555 HCAPLUS
DOCUMENT NUMBER: 140:329560
TITLE: Method of **plate**-making positive-working **lithographic printing plate**
INVENTOR(S): Aogo, Toshiaki; Onishi, Hiroaki
PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 30 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2004109442	A2	20040408	JP 2002-271435	2002 0918
PRIORITY APPLN. INFO.:			JP 2002-271435	2002 0918

AB The pos.-working **lithog. printing** master **plate** contains an IR absorbing dye and a **water-insol.** and alkali-soluble resin in a **heat-sensitive** layer on a **water-insol.**

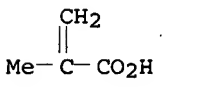
resin- and alkali-soluble resin-based subbing layer formed on the hydrophilic surface of support, in which the solubility of the **heat sensitive** layer in an alkali aqueous solution increases upon receiving an IR irradiation The pos.-working **lithog. printing** master **plate** receives an IR imagewise exposure, and is developed using an alkali developer which contains ≥1 water-soluble polymer compound having sulfonic acid group, carboxylic acid group, phosphonic acid group, and /or salt thereof, a buffer compound, and a base compound

IT **25087-26-7**, Methacrylic acid homopolymer
25300-64-5, Maleic acid-styrene copolymer
28391-39-1
RL: TEM (Technical or engineered material use); USES (Uses)
(developer for **plate**-making of pos.-working **lithog. printing plate**)

RN 25087-26-7 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, homopolymer (9CI) (CA INDEX NAME)

CM 1

CRN 79-41-4
CMF C4 H6 O2

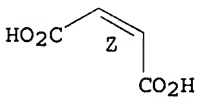


RN 25300-64-5 HCAPLUS
CN 2-Butenedioic acid (2Z)-, polymer with ethenylbenzene (9CI) (CA INDEX NAME)

CM 1

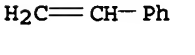
CRN 110-16-7
CMF C4 H4 O4

Double bond geometry as shown.



CM 2

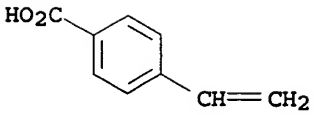
CRN 100-42-5
CMF C8 H8



RN 28391-39-1 HCAPLUS
CN Benzoic acid, 4-ethenyl-, homopolymer (9CI) (CA INDEX NAME)

CM 1

CRN 1075-49-6
CMF C9 H8 O2



IC ICM G03F007-32
ICS G03F007-00; G03F007-004
CC 74-6 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
Section cross-reference(s): 38
ST **plate** making pos working **lithog** **printing** developer polymer compd
IT Phenolic resins, uses
RL: NUU (Other use, unclassified); USES (Uses)
(novolak; **plate**-making of pos.-working **lithog** . **printing plate** from)
IT **25087-26-7**, Methacrylic acid homopolymer
25300-64-5, Maleic acid-styrene copolymer 27754-99-0
28391-39-1 54640-82-3 83328-59-0
RL: TEM (Technical or engineered material use); USES (Uses)
(developer for **plate**-making of pos.-working **lithog. printing plate**)
IT 27029-76-1, m-Cresol-p-cresol-formaldehyde copolymer 134127-48-3
RL: NUU (Other use, unclassified); USES (Uses)
(**plate**-making of pos.-working **lithog. printing plate** from)

L49 ANSWER 12 OF 32 HCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2004:247061 HCAPLUS
DOCUMENT NUMBER: 140:278450
TITLE: Method of making **lithographic printing plate**
INVENTOR(S): Takamiya, Shuichi
PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan
SOURCE: Eur. Pat. Appl., 48 pp.
CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 1400856	A2	20040324	EP 2003-21009	2003 0917
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK				
JP 2004133433	A2	20040430	JP 2003-317014	2003 0909
US 2004063036	A1	20040401	US 2003-663846	2003 0917
PRIORITY APPLN. INFO.:			JP 2002-275050 A	2002 0920
			JP 2002-275052 A	2002 0920

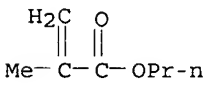
AB A method of making a printing plate from a **heat-sensitive** PS plate of a pos.-working mode for **lithog. printing** includes the steps of exposing the **heat-sensitive** PS plate to light and developing the PS plate using an alkaline developing solution containing at least one compound selected from the group consisting of cationic surfactants and compds. having three or more of an ethylene oxide-terminal group in the mol. thereof. The PS plate has a substrate and an image forming layer formed thereon, said image forming layer comprising a lower layer which is formed on the substrate and contains a **water-insol.** and alkali-soluble resin and an upper **heat-sensitive** layer which is overlaid on the lower layer and contains a **water-insol.** and alkali-soluble resin and an IR absorption dye and exhibits an elevated solubility with respect to alkaline aqueous solns. when heated.

IT **58931-97-8P**, Methacrylic acid-propyl methacrylate copolymer **175221-27-9P**, Ethyl methacrylate-isobutyl methacrylate-methacrylic acid copolymer **502841-14-7P**
RL: PRP (Properties); SPN (Synthetic preparation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(method of making **lithog. printing plate** containing)

RN 58931-97-8 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, polymer with propyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

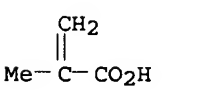
CM 1

CRN 2210-28-8
CMF C7 H12 O2



CM 2

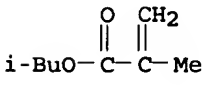
CRN 79-41-4
CMF C4 H6 O2



RN 175221-27-9 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, polymer with ethyl 2-methyl-2-propenoate and 2-methylpropyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

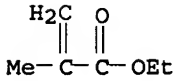
CM 1

CRN 97-86-9
CMF C8 H14 O2



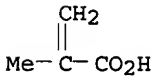
CM 2

CRN 97-63-2
CMF C6 H10 O2



CM 3

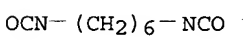
CRN 79-41-4
CMF C4 H6 O2



RN 502841-14-7 HCAPLUS
CN Benzoic acid, 3,5-dihydroxy-, polymer with 1,6-diisocyanatohexane, 1,6-hexanediol and 1,1'-methylenebis[4-isocyanatobenzene] (9CI) (CA INDEX NAME)

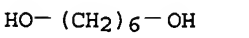
CM 1

CRN 822-06-0
CMF C8 H12 N2 O2



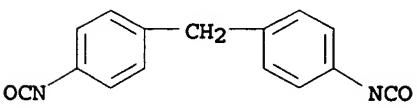
CM 2

CRN 629-11-8
CMF C6 H14 O2



CM 3

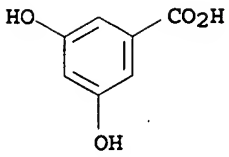
CRN 101-68-8
CMF C15 H10 N2 O2



CM 4

CRN 99-10-5

CMF C7 H6 O4



IC ICM G03F007-32
CC 74-6 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
Section cross-reference(s): 35, 38
ST **lithog printing plate** cationic surfactant
IT Surfactants
(cationic; method of making **lithog. printing plate**)
IT **Lithographic plates**
(method of making **lithog. printing plate**)
IT 56-34-8, Tetraethylammonium chloride 64-20-0, Tetramethylammonium bromide 71-91-0, Tetraethylammonium bromide 75-57-0, Tetramethylammonium chloride 75-59-2, Tetramethylammonium hydroxide 77-98-5, Tetraethylammonium hydroxide 121-54-0 139-07-1 538-71-6 1112-67-0, Tetrabutylammonium chloride 1643-19-2, Tetrabutylammonium bromide 1941-30-6, Tetrapropylammonium bromide 2052-49-5, Tetrabutylammonium hydroxide 4499-86-9, Tetrapropylammonium hydroxide 5810-42-4, Tetrapropylammonium chloride 6272-74-8 7552-23-0 15510-55-1 15809-19-5 22159-25-7 71732-96-2 138107-05-8 184652-52-6 400655-66-5 495417-89-5 495417-91-9 674798-03-9
RL: TEM (Technical or engineered material use); USES (Uses)
(cationic surfactant; method of making **lithog. printing plate** containing)
IT **58931-97-8P**, Methacrylic acid-propyl methacrylate copolymer 153991-97-0P, 2,2-Bis(hydroxymethyl)propionic acid-1,4-butane diol-4,4'-diphenylmethane diisocyanate-hexamethylene diisocyanate-tetraethylene glycol copolymer **175221-27-9P**, Ethyl methacrylate-isobutyl methacrylate-methacrylic acid copolymer **502841-14-7P**
RL: PRP (Properties); SPN (Synthetic preparation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(method of making **lithog. printing plate** containing)
IT 27014-42-2 31694-55-0 36936-60-4 50586-59-9 110134-52-6 154278-88-3
RL: TEM (Technical or engineered material use); USES (Uses)
(method of making **lithog. printing plate** containing)

L49 ANSWER 13 OF 32 HCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2003:671500 HCAPLUS
DOCUMENT NUMBER: 139:188366
TITLE: Positive-working **heat sensitive lithography printing plate** with high development latitude
INVENTOR(S): Watanabe, Noriaki
PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 26 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent

LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2003241388	A2	20030827	JP 2002-43565	2002 0220
US 2003183106	A1	20031002	US 2003-364400	2003 0212
US 6849380	B2	20050201		

PRIORITY APPLN. INFO.: JP 2002-43565 A 2002 0220

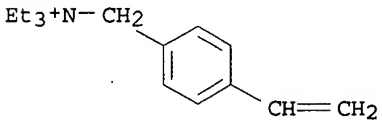
AB Title printing plate is obtained by laminating an aluminum substrate, which has been subjected to anode oxidative treatment, an undercoat comprising polymer having acid group-containing components and onium group-containing components, a middle layer comprising a resin which is **water-insol.** but soluble in alkali, and a **heat-sensitive** layer which comprises a **water-insol.** but alkali-soluble resin and an IR-absorbing dye and becomes more soluble in aqueous alkali upon heating.

IT **220227-02-1 252721-97-4 252721-98-5**
RL: TEM (Technical or engineered material use); USES (Uses)
(undercoat; pos.-working **heat sensitive lithog. printing plate** with high development latitude)

RN 220227-02-1 HCAPLUS
CN Benzenemethanaminium, 4-ethenyl-N,N,N-triethyl-, chloride, polymer with 4-ethenylbenzoic acid (9CI) (CA INDEX NAME)

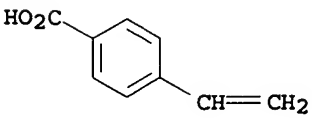
CM 1

CRN 14350-43-7
CMF C15 H24 N . Cl



CM 2

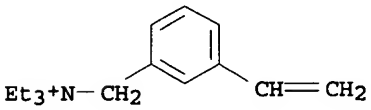
CRN 1075-49-6
CMF C9 H8 O2



RN 252721-97-4 HCAPLUS
CN Benzenemethanaminium, 3-ethenyl-N,N,N-triethyl-, chloride, polymer with 4-ethenylbenzoic acid and 4-ethenyl-N,N,N-triethylbenzenemethanaminium chloride (9CI) (CA INDEX NAME)

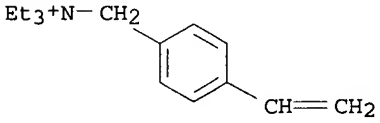
CM 1

CRN 91277-26-8
CMF C15 H24 N . Cl



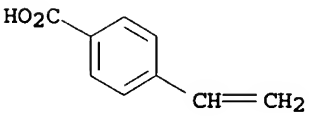
CM 2

CRN 14350-43-7
CMF C15 H24 N . Cl



CM 3

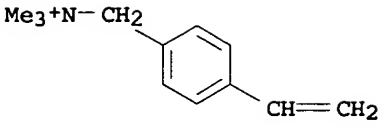
CRN 1075-49-6
CMF C9 H8 O2



RN 252721-98-5 HCAPLUS
CN Benzenemethanaminium, 4-ethenyl-N,N,N-trimethyl-, chloride, polymer with 4-ethenylbenzoic acid (9CI) (CA INDEX NAME)

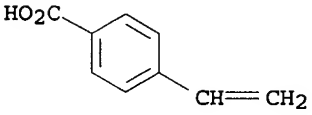
CM 1

CRN 7538-38-7
CMF C12 H18 N . Cl



CM 2

CRN 1075-49-6
CMF C9 H8 O2



IC ICM G03F007-11
ICS B41N001-14; G03F007-00; G03F007-004; G03F007-039
CC 74-6 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
ST pos working **heat sensitive lithog printing plate**
IT Phenolic resins, uses
RL: POF (Polymer in formulation); TEM (Technical or engineered material use); USES (Uses)
(novolak, middle layer and **heat-sensitive** layer; pos.-working **heat sensitive lithog. printing plate** with high development latitude)
IT **Lithographic plates**
(planog.; pos.-working **heat sensitive lithog. printing plate** with high development latitude)
IT 134127-48-3
RL: MOA (Modifier or additive use); USES (Uses)
(IR-absorbing dye; pos.-working **heat sensitive lithog. printing plate** with high development latitude)
IT 7429-90-5, Aluminum, uses
RL: TEM (Technical or engineered material use); USES (Uses)
(alloy; pos.-working **heat sensitive lithog. printing plate** with high development latitude)
IT 27029-76-1, m-Cresol-p-cresol-formaldehyde copolymer
RL: POF (Polymer in formulation); TEM (Technical or engineered material use); USES (Uses)
(middle layer and **heat-sensitive** layer; pos.-working **heat sensitive lithog . printing plate** with high development latitude)
IT 141634-00-6
RL: POF (Polymer in formulation); TEM (Technical or engineered material use); USES (Uses)
(middle layer; pos.-working **heat sensitive lithog. printing plate** with high development latitude)

IT **220227-02-1 252721-97-4 252721-98-5**
RL: TEM (Technical or engineered material use); USES (Uses)
(undercoat; pos.-working **heat sensitive lithog. printing plate** with high development latitude)

L49 ANSWER 14 OF 32 HCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2003:69136 HCAPLUS
DOCUMENT NUMBER: 138:129047
TITLE: Directly imaging IR-sensitive positive-working **lithographic printing** master **plates** having upper recording layer with enol ether compound and lower recording layer
INVENTOR(S): Iwato, Kaoru
PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 26 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2003029400	A2	20030129	JP 2001-220082	2001 0719

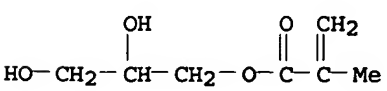
PRIORITY APPLN. INFO.: JP 2001-220082 2001 0719

AB The title master plate has a first recording layer, which contains a **water-insol.** alkali solubilizable resin, and a second image-forming layer, which contains a compound having ≥2 enol ether groups, a resin reacting with the enol ether to form crosslinking, a light-to-heat converting agent, and a **heat-sensitive** acid generator, on a support. The material provides the printing master plate precursor of high sensitivity, wide image-forming condition latitude, and the high scratch-resistance.

IT **187102-42-7 191545-17-2 206447-23-6**
RL: TEM (Technical or engineered material use); USES (Uses)
(resin in second image-forming layer; directly imaging IR-sensitive **lithog. printing plate** master materials)
RN 187102-42-7 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, polymer with 2,3-dihydroxypropyl 2-methyl-2-propenoate and phenylmethyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

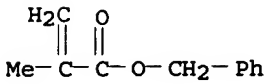
CM 1

CRN 5919-74-4
CMF C7 H12 O4



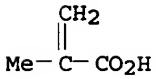
CM 2

CRN 2495-37-6
CMF C11 H12 O2



CM 3

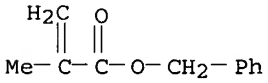
CRN 79-41-4
CMF C4 H6 O2



RN 191545-17-2 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, polymer with 2-hydroxyethyl 2-methyl-2-propenoate, methyl 2-methyl-2-propenoate and phenylmethyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

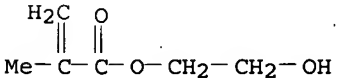
CM 1

CRN 2495-37-6
CMF C11 H12 O2



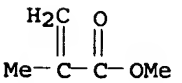
CM 2

CRN 868-77-9
CMF C6 H10 O3



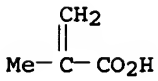
CM 3

CRN 80-62-6
CMF C5 H8 O2



CM 4

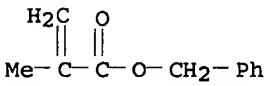
CRN 79-41-4
CMF C4 H6 O2



RN 206447-23-6 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, polymer with 2-hydroxyethyl 2-propenoate, phenylmethyl 2-methyl-2-propenoate and 2-propenenitrile (9CI) (CA INDEX NAME)

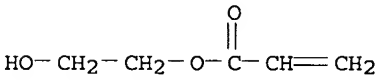
CM 1

CRN 2495-37-6
CMF C11 H12 O2



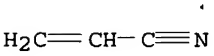
CM 2

CRN 818-61-1
CMF C5 H8 O3



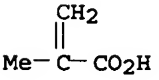
CM 3

CRN 107-13-1
CMF C3 H3 N



CM 4

CRN 79-41-4
CMF C4 H6 O2



IC ICM G03F007-004
ICS G03F007-004; G03F007-00; G03F007-11
CC 74-6 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
Section cross-reference(s): 35
ST imaging IR pos **lithog printing** master **plate**
IT Light-sensitive materials
Lithographic plates

(directly imaging IR-sensitive **lithog. printing plate** master materials)

IT 13891-29-7 66003-78-9 84563-54-2 220122-66-7
RL: TEM (Technical or engineered material use); USES (Uses)
(acid generator in second image-forming layer; directly imaging IR-sensitive **lithog. printing plate** master materials)

IT 52411-04-8 134905-23-0 491578-24-6 491578-25-7 491578-26-8 491578-27-9 491578-28-0 491578-29-1
RL: TEM (Technical or engineered material use); USES (Uses)
(enol ether in second image-forming layer; directly imaging IR-sensitive **lithog. printing plate** master materials)

IT 134127-48-3 460337-33-1 491578-31-5 491578-33-7
RL: TEM (Technical or engineered material use); USES (Uses)
(light-to-heat converting agent in second image-forming layer; directly imaging IR-sensitive **lithog. printing plate** master materials)

IT 63-74-1, p-Aminobenzenesulfonamide 79-41-4, Methacrylic acid, reactions
RL: RCT (Reactant); RACT (Reactant or reagent)
(resin in first image-forming layer; directly imaging IR-sensitive **lithog. printing plate** master materials)

IT 56992-87-1P, N-(p-Aminosulfonylphenyl)methacrylamide
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(resin in first image-forming layer; directly imaging IR-sensitive **lithog. printing plate** master materials)

IT 463312-06-3P, N-(p-Aminosulfonylphenyl)methacrylamide-ethyl methacrylate-acrylonitrile-methyl methacrylate copolymer
RL: SPN (Synthetic preparation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(resin in first image-forming layer; directly imaging IR-sensitive **lithog. printing plate** master materials)

IT 24979-70-2, 4-Hydroxystyrene homopolymer 187102-42-7 191545-17-2 206447-23-6 491578-23-5
RL: TEM (Technical or engineered material use); USES (Uses)
(resin in second image-forming layer; directly imaging IR-sensitive **lithog. printing plate** master materials)

L49 ANSWER 15 OF 32 HCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2002:793941 HCAPLUS
DOCUMENT NUMBER: 137:302272
TITLE: Substrate improvements for thermally imageable **lithog printing plate**
INVENTOR(S): Huang, Jen-Chi; Zhong, Xing-Fu; Pappas, S. Peter; Saraiya, Shashikant
PATENT ASSIGNEE(S): Kodak Polychrome Graphics, L.L.C., USA
SOURCE: PCT Int. Appl., 45 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002082183	A1	20021017	WO 2002-US2037	20020123

	W: JP				
	RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR				
US	2002172888	A1	20021121	US 2001-826315	2001 0404
US	6692890	B2	20040217		
EP	1373979	A1	20040102	EP 2002-709152	2002 0123
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI, CY, TR				
JP	2004524579	T2	20040812	JP 2002-579889	2002 0123
PRIORITY APPLN. INFO.:				US 2001-826315 A	2001 0404
				WO 2002-US2037 W	2002 0123

AB The present invention includes a radiation-imageable element for **lithog. printing plate** having a hydrophilic anodized aluminum base with a surface having pores and an image-forming layer having polymer particles coated on the aluminum base. The ratio of the average pore diameter to the average particle diameter is from 0.4:1 to 10:1. The present invention further includes a method of producing the imaged element. The method includes the steps of imagewise exposing the radiation-imageable element to radiation to produce exposed and unexposed regions and contacting the imagewise exposed radiation-imageable element and a developer to remove the exposed or unexposed regions. The present invention provides average pore diameter to average particle diameter ratios that can enhance the interaction of the image-forming layer with the substrate surface layer following thermal imaging by allowing the polymer particles to enter into the oxide pores of the substrate, thereby enhancing adhesion. The enhanced adhesion, in turn, will enhance the sensitivity and the press life of the printing plates.

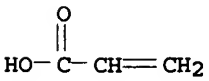
IT **9003-01-4**, Polyacrylic acid
RL: TEM (Technical or engineered material use); USES (Uses)
(interlayer; porous substrate for thermally imageable **lithog printing plate**)

RN 9003-01-4 HCAPLUS

CN 2-Propenoic acid, homopolymer (9CI) (CA INDEX NAME)

CM 1

CRN 79-10-7
CMF C3 H4 O2



IT **25085-34-1P**, Acrylic acid-styrene copolymer
RL: PRP (Properties); SPN (Synthetic preparation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(porous substrate for thermally imageable **lithog printing plate**)

RN 25085-34-1 HCAPLUS

CN 2-Propenoic acid, polymer with ethenylbenzene (9CI) (CA INDEX

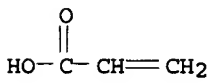
NAME)

CM 1

CRN 100-42-5
CMF C8 H8

CM 2

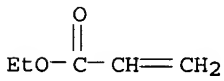
CRN 79-10-7
CMF C3 H4 O2



IT **25133-97-5P**, Ethyl acrylate-methacrylic acid-methyl methacrylate copolymer
RL: SPN (Synthetic preparation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(porous substrate for thermally imageable **lithog printing plate**)
RN 25133-97-5 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, polymer with ethyl 2-propenoate and methyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

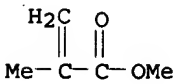
CM 1

CRN 140-88-5
CMF C5 H8 O2



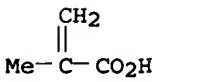
CM 2

CRN 80-62-6
CMF C5 H8 O2



CM 3

CRN 79-41-4
CMF C4 H6 O2



IC ICM G03F007-00
ICS G03F007-004; G03F007-039; G03F007-09; G03F007-20; G03F007-40
CC 74-6 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
Section cross-reference(s): 38
ST **thermally sensitive lithog printing plate** porous substrate
IT **Lithographic plates**
(**thermally sensitive**; porous substrate for **thermally** imageable **lithog printing plate**)
IT 6834-92-0 **9003-01-4**, Polyacrylic acid 27754-99-0, Polyvinyl phosphonic acid
RL: TEM (Technical or engineered material use); USES (Uses)
(interlayer; porous substrate for thermally imageable **lithog printing plate**)
IT **25085-34-1P**, Acrylic acid-styrene copolymer
RL: PRP (Properties); SPN (Synthetic preparation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(porous substrate for thermally imageable **lithog printing plate**)
IT **25133-97-5P**, Ethyl acrylate-methacrylic acid-methyl methacrylate copolymer
RL: SPN (Synthetic preparation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(porous substrate for thermally imageable **lithog printing plate**)
IT 224966-09-0, CWA
RL: TEM (Technical or engineered material use); USES (Uses)
(porous substrate for thermally imageable **lithog printing plate**)
IT 7429-90-5, Aluminum, uses
RL: TEM (Technical or engineered material use); USES (Uses)
(substrate; porous substrate for thermally imageable **lithog printing plate**)
REFERENCE COUNT: 16 THERE ARE 16 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L49 ANSWER 16 OF 32 HCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2002:686759 HCAPLUS
DOCUMENT NUMBER: 137:224165
TITLE: Thermal-type presensitized **lithographic printing plate** containing organic silver salt and lipophilic thermoplastic grain and manufacture thereof
INVENTOR(S): Matsumura, Tomoyuki
PATENT ASSIGNEE(S): Konica Co., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 19 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2002258484	A2	20020911	JP 2001-59868	

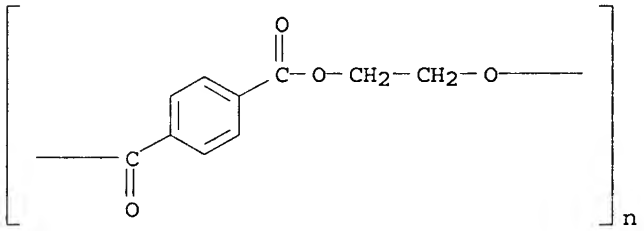
PRIORITY APPLN. INFO.: JP 2001-59868 2001 0305 2001 0305

AB The thermal-type presensitized **lithog. printing plate** comprises a recording layer formed on a hydrophilic layer on an Al support, in which the recording layer contains a hydrophilic binder, a lipophilic **thermoplastic** grain, a heat-**sensitive** reducing agent, a photosensitive Ag halide, and an organic Ag salt. The Al support is roughened mech. and/or elec. The process comprises the steps of (1) effecting an imagewise exposure, (2) heat-developing at a temperature lower than the softening point of the lipophilic thermoplastic grain such as carnauba wax and oligosaccharide, thereby forming black Ag which functions as a light-to-heat conversion element, (3) effecting an overall exposure, and (4) processing with a dampening water.

IT **25038-59-9**, PET, uses
RL: TEM (Technical or engineered material use); USES (Uses)
(support; thermal-type presensitized **lithog. printing plate** from org silver salt and lipophilic thermoplastic grain)

RN 25038-59-9 HCAPLUS

CN Poly(oxy-1,2-ethanediyloxycarbonyl-1,4-phenylenecarbonyl) (9CI) (CA INDEX NAME)



IC ICM G03F007-06
ICS B41N001-14; G03C001-498; G03C001-76; G03F007-00; G03F007-004; G03F007-26

CC 74-6 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)

ST thermal presensitized **lithog printing plate** org silver salt; lipophilic thermoplastic grain thermal presensitized **lithog printing plate**

IT Polyesters, uses
RL: TEM (Technical or engineered material use); USES (Uses)
(support; thermal-type presensitized **lithog. printing plate** from org silver salt and lipophilic thermoplastic grain)

IT **Lithographic plates**
(thermal-type presensitized **lithog. printing plate** from org silver salt and lipophilic thermoplastic grain)

IT Carnauba wax
RL: TEM (Technical or engineered material use); USES (Uses)
(thermal-type presensitized **lithog. printing plate** from org silver salt and lipophilic thermoplastic grain)

IT 99-20-7
RL: TEM (Technical or engineered material use); USES (Uses)
(hydrophilic binder; thermal-type presensitized **lithog. printing plate** from organic silver salt and

lipophilic thermoplastic grain)
IT **25038-59-9**, PET, uses
RL: TEM (Technical or engineered material use); USES (Uses)
(support; thermal-type presensitized **lithog. printing plate** from org silver salt and lipophilic thermoplastic grain)
IT 7429-90-5, Aluminum, uses 37321-70-3, JIS A1050
RL: DEV (Device component use); USES (Uses)
(thermal-type presensitized **lithog. printing plate** from org silver salt and lipophilic thermoplastic grain)
IT 112-85-6, Behenic acid 506-30-9, Arachidic acid 2489-05-6, Silver behenate 7761-88-8, Silver nitrate, uses 24687-57-8, Silver arachidate
RL: TEM (Technical or engineered material use); USES (Uses)
(thermal-type presensitized **lithog. printing plate** from org silver salt and lipophilic thermoplastic grain)
IT 7292-14-0
RL: TEM (Technical or engineered material use); USES (Uses)
(thermal-type presensitized **lithog. printing plate** from organic silver salt and lipophilic thermoplastic grain)

L49 ANSWER 17 OF 32 HCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2001:713247 HCAPLUS
DOCUMENT NUMBER: 135:264594
TITLE: Planographic thermal processless imaging printing plate
INVENTOR(S): Burberry, Mitchell S.; Bailey, David B.
PATENT ASSIGNEE(S): Kodak Polychrome Graphics Co. Ltd., USA
SOURCE: PCT Int. Appl., 36 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001070502	A2	20010927	WO 2001-US8802	2001 0319
WO 2001070502	A3	20020103		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
US 6458507	B1	20021001	US 2000-531117	2000 0320
EP 1265753	A2	20021218	EP 2001-924211	2001 0319
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
JP 2004517752	T2	20040617	JP 2001-568733	2001

PRIORITY APPLN. INFO.: US 2000-531117 A 0319
2000 0320

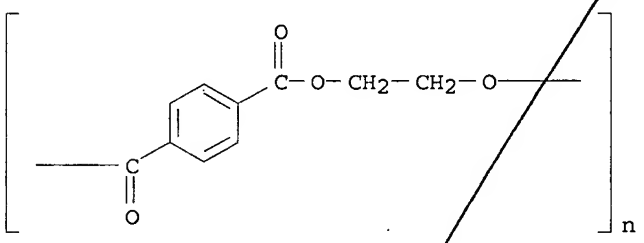
WO 2001-US8802 W 2001 0319

AB A **thermally sensitive** imaging member can be imaged using thermal energy such as from an IR-emitting laser and then used for **lithog. printing.** The imaging member includes a support having an ink-repellent subbing layer and a **thermally sensitive**, ink-repellent surface imaging layer. Imaging causes a "switching" in the exposed surface regions to a more oleophilic or ink-accepting nature. Post-imaging processing is unnecessary in this imaging system. The surface imaging layer includes a **thermally sensitive** copolymer of silicone "soft" segments and **thermally sensitive** "hard" segments as well as a photothermal conversion material that is IR radiation sensitive.

IT **25038-59-9**, Polyethylene terephthalate, uses
RL: TEM (Technical or engineered material use); USES (Uses)
(support; planog. thermal processless imaging printing plate comprising ink-repellent subbing layer and **thermally sensitive** imaging layer)

RN 25038-59-9 HCAPLUS

CN Poly(oxy-1,2-ethanediyloxycarbonyl-1,4-phenylenecarbonyl) (9CI) (CA INDEX NAME)



IC ICM B41C001-10
ICS B41M005-36

CC 74-6 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
Section cross-reference(s): 38

IT **Lithographic plates**
(planog. thermal processless imaging **printing** plate comprising ink-repellent subbing layer and **thermally sensitive** imaging layer)

IT Polysiloxanes, preparation
RL: PNU (Preparation, unclassified); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(planog. thermal processless imaging printing plate comprising ink-repellent subbing layer and **thermally sensitive** imaging layer)

IT Carbon black, uses
RL: TEM (Technical or engineered material use); USES (Uses)
(planog. thermal processless imaging printing plate comprising ink-repellent subbing layer and **thermally sensitive** imaging layer)

IT Printing plates
(planog.; planog. thermal processless imaging printing plate comprising ink-repellent subbing layer and **thermally sensitive** imaging layer)

IT Polyesters, uses
RL: TEM (Technical or engineered material use); USES (Uses)
(support; planog. thermal processless imaging printing plate comprising ink-repellent subbing layer and **thermally sensitive** imaging layer)
IT 199784-36-6P
RL: PNU (Preparation, unclassified); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(planog. thermal processless imaging printing plate comprising ink-repellent subbing layer and **thermally sensitive** imaging layer)
IT 362515-25-1P
RL: SPN (Synthetic preparation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(planog. thermal processless imaging printing plate comprising ink-repellent subbing layer and **thermally sensitive** imaging layer)
IT **25038-59-9**, Polyethylene terephthalate, uses
RL: TEM (Technical or engineered material use); USES (Uses)
(support; planog. thermal processless imaging printing plate comprising ink-repellent subbing layer and **thermally sensitive** imaging layer)

L49 ANSWER 18 OF 32 HCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2001:573173 HCAPLUS
DOCUMENT NUMBER: 135:144733
TITLE: **Lithographic printing plate** master suitable for IR laser heat mode digital exposure
INVENTOR(S): Maemoto, Kazuo; Kita, Nobuyuki
PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 15 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

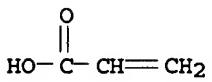
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2001213062	A2	20010807	JP 2000-23983	2000 0201
PRIORITY APPLN. INFO.:			JP 2000-23983	2000 0201

AB The title **lithog. printing plate** master comprises an Al support, a hydrophilic layer comprised of colloid and photothermal conversion material, and a **heat-sensitive** layer, wherein the colloid is oxide or hydroxide of Be, Mg, Al, Si, Ti, B, Ge, Sn, Zr, Ir, V, Sb, or transition metal element. The **heat-sensitive** layer may contain polymer microparticles containing heat-reactive-functional groups or microcapsules containing heat-reactive-functional group-containing compds. A **water-insol.** polymer layer (or a heat-insulator layer) may be interposed between the Al support and the hydrophilic layer. The photothermal conversion material in the hydrophilic layer may be metal microparticles. The **lithog. printing plate** master shows good developability, high sensitivity, and excellent printability.
IT **9003-01-4**, Poly(acrylic acid)
RL: TEM (Technical or engineered material use); USES (Uses)
(in hydrophilic layer of **lithog. printing**

plate master suitable for IR laser heat mode digital exposure)
RN 9003-01-4 HCAPLUS
CN 2-Propenoic acid, homopolymer (9CI) (CA INDEX NAME)

CM 1

CRN 79-10-7
CMF C3 H4 O2



IC ICM B41N001-14
ICS B41C001-055; G03F007-00; G03F007-11
CC 74-6 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
ST **lithog printing plate** master hydrophilic layer IR laser exposure
IT Polyvinyl butyrals
RL: TEM (Technical or engineered material use); USES (Uses)
(in heat-insulator layer of **lithog. printing plate** master suitable for IR laser heat mode digital exposure)
IT **Lithographic plates**
(**lithog. printing plate** master suitable for IR laser heat mode digital exposure)
IT 289893-03-4
RL: TEM (Technical or engineered material use); USES (Uses)
(IR dye in **heat-sensitive** layer of **lithog. printing plate** master suitable for IR laser heat mode digital exposure)
IT 7440-22-4, Silver, uses
RL: TEM (Technical or engineered material use); USES (Uses)
(colloidal; in hydrophilic layer of **lithog. printing plate** master suitable for IR laser heat mode digital exposure)
IT **9003-01-4**, Poly(acrylic acid) 26022-14-0, Poly(2-hydroxyethyl acrylate)
RL: TEM (Technical or engineered material use); USES (Uses)
(in hydrophilic layer of **lithog. printing plate** master suitable for IR laser heat mode digital exposure)
IT 67-56-1, Methanol, uses 7631-86-9, Silica, uses
RL: TEM (Technical or engineered material use); USES (Uses)
(methanol silica sol in hydrophilic layer of **lithog. printing plate** master suitable for IR laser heat mode digital exposure)
IT 30528-89-3P, Allyl methacrylate-butyl methacrylate copolymer
RL: SPN (Synthetic preparation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(polymer microparticles in **heat-sensitive** layer of **lithog. printing plate** master suitable for IR laser heat mode digital exposure)
IT 9003-53-6, Polystyrene
RL: TEM (Technical or engineered material use); USES (Uses)
(polymer microparticles in **heat-sensitive** layer of **lithog. printing plate** master suitable for IR laser heat mode digital exposure)
IT 7429-90-5, Aluminum, uses
RL: TEM (Technical or engineered material use); USES (Uses)
(support of **lithog. printing plate** master suitable for IR laser heat mode digital exposure)

L49 ANSWER 19 OF 32 HCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2001:435467 HCAPLUS
DOCUMENT NUMBER: 135:53518
TITLE: Heat-sensitive **lithographic printing plate** precursor for IR-laser exposure
INVENTOR(S): Kita, Nobuyuki; Maemoto, Kazuo
PATENT ASSIGNEE(S): Japan
SOURCE: U.S. Pat. Appl. Publ., 11 pp.
CODEN: USXXCO
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2001003643	A1	20010614	US 2000-729350	2000 1205
US 6576397	B2	20030610		
JP 2001166459	A2	20010622	JP 1999-346317	1999 1206
PRIORITY APPLN. INFO.:			JP 1999-346317 A	1999 1206

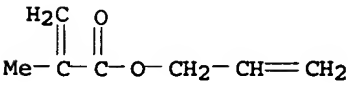
AB A heat-sensitive **lithog. printing plate** precursor comprises a thermal polymerization layer, which contains an aqueous alkali-soluble polymer having addition polymerizable unsatd. bonds at the side chains and a thermal polymerization initiator, and a water-soluble overcoat layer, which has a water-soluble polymer and a compound capable of converting light into heat, on a support, which has a hydrophilic surface. The **lithog. printing plate** precursor, which contains thermal polymerizing materials, is handled in a bright room.

IT **90216-38-9P**, Allyl methacrylate-methacrylic acid copolymer
102772-82-7P, Methyl methacrylate-ethyl methacrylate-methacrylic acid-acrylonitrile copolymer
RL: SPN (Synthetic preparation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(thermal polymerization layer in heat-sensitive **lithog. printing plate** precursor)

RN 90216-38-9 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, polymer with 2-propenyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

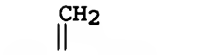
CM 1

CRN 96-05-9
CMF C7 H10 O2



CM 2

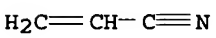
CRN 79-41-4
CMF C4 H6 O2



RN 102772-82-7 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, polymer with ethyl 2-methyl-2-propenoate, methyl 2-methyl-2-propenoate and 2-propenenitrile (9CI) (CA INDEX NAME)

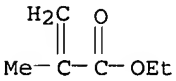
CM 1

CRN 107-13-1
CMF C3 H3 N



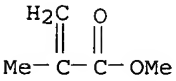
CM 2

CRN 97-63-2
CMF C6 H10 O2



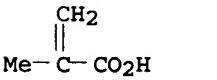
CM 3

CRN 80-62-6
CMF C5 H8 O2



CM 4

CRN 79-41-4
CMF C4 H6 O2



IC ICM G03C007-00
ICS G03C001-73; G03C001-77; G03F007-11
INCL 430273100
CC 74-6 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
ST heat sensitive **lithog printing plate** precursor IR laser exposure
IT **Lithographic plates**
(heat-sensitive **lithog. printing**

plate precursor for IR-laser exposure)
IT Polymerization
(**thermal**; heat-**sensitive lithog.**
printing plate precursor for IR-laser
exposure)
IT **90216-38-9P**, Allyl methacrylate-methacrylic acid copolymer
102772-82-7P, Methyl methacrylate-ethyl
methacrylate-methacrylic acid-acrylonitrile copolymer
RL: SPN (Synthetic preparation); TEM (Technical or engineered
material use); PREP (Preparation); USES (Uses)
(thermal polymerization layer in heat-sensitive **lithog.**
printing plate precursor)
IT 103-01-5, N-Phenylglycine 147-14-8, Copper β-phthalocyanine
150-76-5, p-Methoxyphenol 1707-68-2, 2-(o-Chlorophenyl)-4,5-
diphenylimidazolyl dimer 4986-89-4, Pentaerythritol
tetraacrylate 33943-20-3, Di-tert-butyl peroxyisophthalate
77473-08-6, 3,3',4,4'-Tetrakis(tert-butylperoxycarbonyl)benzopheno
ne
RL: TEM (Technical or engineered material use); USES (Uses)
(thermal polymerization layer in heat-sensitive **lithog.**
printing plate precursor)

L49 ANSWER 20 OF 32 HCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2000:875699 HCAPLUS
DOCUMENT NUMBER: 134:49238
TITLE: Thermal imaging composition and member containing sulfonated IR dye and methods of imaging and printing
INVENTOR(S): Fleming, James C.; Leon, Jeffrey W.; Stegman, David A.; Williams, Kevin W.
PATENT ASSIGNEE(S): Eastman Kodak Company, USA
SOURCE: U.S., 22 pp.
CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 6159657	A	20001212	US 1999-387021	19990831
DE 10042294	A1	20010412	DE 2000-10042294	20000829
JP 2001130159	A2	20010515	JP 2000-262836	20000831
US 6537730	B1	20030325	US 2000-652344	20000831
PRIORITY APPLN. INFO.:			US 1999-387021 A	19990831

AB An imaging member, such as a neg.-working printing plate or on-press cylinder, can be prepared with a hydrophilic imaging layer comprised of a heat-sensitive hydrophilic polymer having ionic moieties and an IR radiation sensitive dye having multiple sulfo groups. The heat-sensitive polymer and IR dye can be formulated in water or water-miscible solvents to provide highly **thermal sensitive** imaging compns. In the imaging member, the polymer reacts to provide increased hydrophobicity in areas exposed to energy that provides or

generates heat. For example, heat can be supplied by laser irradiation in the IR region of the electromagnetic spectrum. The heat-sensitive polymer is considered "switchable" in response to heat, and provides a lithog. image without wet processing.

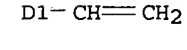
IT **100356-86-3P**
RL: SPN (Synthetic preparation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(thermal imaging composition and member containing sulfonated IR dye)

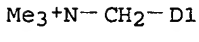
RN 100356-86-3 HCAPLUS

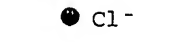
CN Benzenemethanaminium, ar-ethenyl-N,N,N-trimethyl-, chloride, polymer with 2-methyl-2-propenoic acid (9CI) (CA INDEX NAME)

CM 1

CRN 26616-35-3
CMF C12 H18 N . Cl
CCI IDS

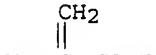






CM 2

CRN 79-41-4
CMF C4 H6 O2



IC ICM G03C001-73
ICS G03C001-76; G03C001-77

INCL 430270100

CC 74-6 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)

ST **lithog printing plates;**
thermal sensitive polymer cyanine dye

IT Cyanine dyes
Lithographic plates
Thermal printing materials
(thermal imaging composition and member containing sulfonated IR dye)

IT **100356-86-3P** 113995-59-8P 119261-38-0P 262283-81-8P
262283-83-0P 312963-46-5P 312963-48-7P 312963-49-8P
312963-50-1P 312963-51-2P
RL: SPN (Synthetic preparation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(thermal imaging composition and member containing sulfonated IR dye)

REFERENCE COUNT: 19 THERE ARE 19 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L49 ANSWER 21 OF 32 HCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2000:321469 HCAPLUS
DOCUMENT NUMBER: 132:341223
TITLE: Thermosensitive composition for **lithographic plate** preparation
INVENTOR(S): Morgan, David A.
PATENT ASSIGNEE(S): USA
SOURCE: U.S., 4 pp.
CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 6063528	A	20000516	US 1997-859681	1997 0520

PRIORITY APPLN. INFO.: US 1997-859681 1997 0520

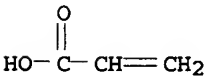
AB A thermosensitive composition comprises poly(acrylic acid), a metal salt of a long-chain fatty acid, such as silver behenate, an IR-absorbing agent, and modifiers, such as polymers and fillers. Both the water solubility and the affinity to water and oil of the thermosensitive composition are altered upon heating by imagewise exposure to an IR laser, and thus the thermosensitive composition is used for **lithog. plate** preparation

IT **9003-01-4**, Poly(acrylic acid)
RL: TEM (Technical or engineered material use); USES (Uses)
(K 702; IR laser-**sensitive thermal** imaging materials for **lithog. plate** preparation containing silver behenate and)

RN 9003-01-4 HCAPLUS
CN 2-Propenoic acid, homopolymer (9CI) (CA INDEX NAME)

CM 1

CRN 79-10-7
CMF C3 H4 O2



IC ICM G03C003-00
INCL 430009000
CC 74-6 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
ST thermosensitive compn polyacrylic acid silver behenate **lithog plate**; IR laser thermosensitive compn **lithog plate**
IT Polyvinyl butyrals
RL: TEM (Technical or engineered material use); USES (Uses)
(B 72; IR laser-**sensitive thermal** imaging materials for **lithog. plate** preparation containing

poly(acrylic acid), silver behenate and)
IT **Lithographic plates**
(IR laser-**sensitive thermal** imaging materials containing poly(acrylic acid) and silver behenate for preparation of)
IT Carbon black, uses
RL: TEM (Technical or engineered material use); USES (Uses)
(IR laser-**sensitive thermal** imaging materials for **lithog. plate** preparation containing poly(acrylic acid), silver behenate and)
IT Recording materials
(**thermal**, IR laser-**sensitive**; containing poly(acrylic acid) and silver behenate for **lithog. plate** preparation)
IT 2489-05-6, Silver behenate 3507-99-1, Silver stearate
RL: TEM (Technical or engineered material use); USES (Uses)
(IR laser-**sensitive thermal** imaging materials for **lithog. plate** preparation containing poly(acrylic acid) and)
IT 354-33-6, FC125 7631-86-9, Colloidal silica, uses 9002-89-5, Poly(vinyl alcohol) 9002-93-1, Triton X100 243847-83-8, ADS830 243847-84-9, WS 830
RL: TEM (Technical or engineered material use); USES (Uses)
(IR laser-**sensitive thermal** imaging materials for **lithog. plate** preparation containing poly(acrylic acid), silver behenate and)
IT **9003-01-4**, Poly(acrylic acid)
RL: TEM (Technical or engineered material use); USES (Uses)
(K 702; IR laser-**sensitive thermal** imaging materials for **lithog. plate** preparation containing silver behenate and)
REFERENCE COUNT: 18 THERE ARE 18 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L49 ANSWER 22 OF 32 HCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2000:317209 HCAPLUS
DOCUMENT NUMBER: 132:341221
TITLE: **Heat**-mode **sensitive** image-forming element for manufacturing positive-working printing plate
INVENTOR(S): Verschueren, Eric; Vermeersch, Joan; Van Damme, Marc; Hauquier, Guido; Van Aert, Huub
PATENT ASSIGNEE(S): AGFA Gevaert N.V., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 15 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2000137321	A2	20000516	JP 1999-299427	1999 1021
US 6489079	B1	20021203	US 1999-391421	1999 0908
PRIORITY APPLN. INFO.:			EP 1998-203609 A	1998 1026
			US 1998-112068P P	1998

AB In the title image-forming element possessing a 1st layer containing an aqueous **alkaline** solution-**soluble** polymer and an IR sensitive, **alkaline** developing solution-impermeable uppermost layer on the same side of a lithog. base having a hydrophilic surface, the 1st layer and the uppermost layer may be 1 of the same layer and the uppermost layer contains 0.5-500 mg/m2 of ≥1 block copolymer. The element shows broader development latitude, high resolution, and improved phys. and chem resistance.

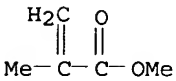
IT **113889-78-4**, Methacrylic acid-methyl methacrylate block copolymer
RL: DEV (Device component use); USES (Uses)
(MA 1007; heat mode-type **lithog. plate** containing alkali-soluble polymer and uppermost layer containing block copolymer)

RN 113889-78-4 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, polymer with methyl 2-methyl-2-propenoate, block (9CI) (CA INDEX NAME)

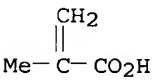
CM 1

CRN 80-62-6
CMF C5 H8 O2



CM 2

CRN 79-41-4
CMF C4 H6 O2



IC ICM G03F007-00
ICS B41N001-14; G03F007-032; G03F007-11

CC 74-6 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
Section cross-reference(s): 38

ST heat mode **lithog plate**; block copolymer uppermost layer **lithog plate**

IT Isoprene-styrene rubber
RL: DEV (Device component use); USES (Uses)
(block, Kraton D; heat mode-type **lithog. plate** containing alkali-soluble polymer and uppermost layer containing block copolymer)

IT Styrene-butadiene rubber, uses
RL: DEV (Device component use); USES (Uses)
(block, triblock, Cariflex TR 1102; heat mode-type **lithog. plate** containing alkali-soluble polymer and uppermost layer containing block copolymer)

IT **Lithographic plates**
(heat mode-type **lithog. plate** containing alkali-soluble polymer and uppermost layer containing block copolymer)

IT Carbon black, uses
RL: DEV (Device component use); USES (Uses)
(heat mode-type **lithog. plate** containing

alkali-soluble polymer and uppermost layer containing block copolymer)
IT Phenolic resins, uses
RL: DEV (Device component use); USES (Uses)
(novolak; heat mode-type **lithog. plate** containing alkali-soluble polymer and uppermost layer containing block copolymer)
IT 148277-56-9, Butyl methacrylate-ethylene oxide block copolymer
RL: DEV (Device component use); USES (Uses)
(BE 1010; heat mode-type **lithog. plate** containing alkali-soluble polymer and uppermost layer containing block copolymer)
IT **113889-78-4**, Methacrylic acid-methyl methacrylate block copolymer
RL: DEV (Device component use); USES (Uses)
(MA 1007; heat mode-type **lithog. plate** containing alkali-soluble polymer and uppermost layer containing block copolymer)
IT 108967-97-1, Ethylene oxide-methyl methacrylate block copolymer
RL: DEV (Device component use); USES (Uses)
(ME 1010; heat mode-type **lithog. plate** containing alkali-soluble polymer and uppermost layer containing block copolymer)
IT 107311-90-0, Ethylene oxide-styrene block copolymer
RL: DEV (Device component use); USES (Uses)
(SE 0720; heat mode-type **lithog. plate** containing alkali-soluble polymer and uppermost layer containing block copolymer)
IT 9004-70-0, Nitrocellulose 100346-90-5, ALNOVOL SPN 452
110351-66-1D, Ethylene-styrene block copolymer, sulfonated
191617-94-4, KRATON Liquid L 2203 204277-94-1, KRATON Liquid EKP 207 204277-98-5, KRATON Liquid L 1302 220971-33-5, ST 798
268559-67-7, VP-SE 1010A
RL: DEV (Device component use); USES (Uses)
(heat mode-type **lithog. plate** containing alkali-soluble polymer and uppermost layer containing block copolymer)
IT 105729-79-1
RL: DEV (Device component use); USES (Uses)
(isoprene-styrene rubber, block, Kraton D; heat mode-type **lithog. plate** containing alkali-soluble polymer and uppermost layer containing block copolymer)
IT 105729-79-1, Isoprene-styrene block copolymer
RL: DEV (Device component use); USES (Uses)
(rubber; heat mode-type **lithog. plate** containing alkali-soluble polymer and uppermost layer containing block copolymer)
IT 106107-54-4 694491-73-1
RL: DEV (Device component use); USES (Uses)
(styrene-butadiene rubber, block, triblock, Cariflex TR 1102; heat mode-type **lithog. plate** containing alkali-soluble polymer and uppermost layer containing block copolymer)

L49 ANSWER 23 OF 32 HCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2000:106803 HCAPLUS
DOCUMENT NUMBER: 132:158946
TITLE: Direct imaging-type **lithographic** original **plate** and manufacture of **lithographic printing plate**
INVENTOR(S): Goto, Kazuki; Tabata, Kenichi; Ikeda, Norimasa
PATENT ASSIGNEE(S): Toray Industries, Inc., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 13 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2000043437	A2	20000215	JP 1999-141448	1999 0521
PRIORITY APPLN. INFO.:			JP 1998-147482 A	1998 0528

AB The title **lithog.** original **plate** comprises a substrate coated with a heat-sensitive layer having a thickness of ≤5 μm and containing a light-heat-converting substance and a thermosetting compound and then with a film-forming polymer layer having a thickness of ≥1 μm and an O permeability of ≤30 cm3-cm-m-2-24 h-1-atm-1. A **lithog.** original **plate**, comprising a substrate laminated successively with a hydrophilic swelling layer having a thickness of ≤5 μm, a water absorption of 1-50 g/m2, and a water swelling rate of 10-2000%, the heat-sensitive layer, and the film-forming polymer layer, is imagewise exposed to a laser beam to cure the exposed areas of the heat-sensitive layer and the polymer layer is then peeled off to remove the unexposed areas of the heat-sensitive layer together with the layer to expose the non-image areas of the hydrophilic swelling layer for forming ink-repellent non-image areas. The **lithog.** original **plate** can be treated easily in platemaking and the resulting printing plate shows improved image reproducibility and printing durability.

IT **24980-58-3**, Acrylic acid-vinyl acetate copolymer
RL: DEV (Device component use); USES (Uses)
(hydrophilic swelling layer; **lithog. plate** having heat-sensitive layer containing light-heat-converting material and thermosetting compound and oxygen permeability-controlled layer)

RN 24980-58-3 HCAPLUS

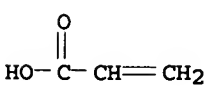
CN 2-Propenoic acid, polymer with ethenyl acetate (9CI) (CA INDEX NAME)

CM 1

CRN 108-05-4
CMF C4 H6 O2

CM 2

CRN 79-10-7
CMF C3 H4 O2



IC ICM B41N001-14
ICS G03F007-00; G03F007-004; G03F007-038

CC 74-6 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
Section cross-reference(s): 38

ST **lithog plate** hydrophilic swelling layer; heat **sensitive** layer **thermosetting** compd; oxygen permeability controlled layer **lithog plate**

IT Styrene-butadiene rubber, uses
RL: DEV (Device component use); USES (Uses)
(JSR 0548, hydrophilic swelling layer; **lithog. plate** having heat-sensitive layer containing light-heat-converting material and thermosetting compound and oxygen permeability-controlled layer)

IT Carbon black, uses
RL: DEV (Device component use); USES (Uses)
(Sohn Black; **lithog. plate** having heat-sensitive layer containing light-heat-converting material and thermosetting compound and oxygen permeability-controlled layer)

IT Aminoplasts
Epoxy resins, uses
RL: DEV (Device component use); USES (Uses)
(heat-sensitive layer; **lithog. plate** having heat-sensitive layer containing light-heat-converting material and thermosetting compound and oxygen permeability-controlled layer)

IT **Lithographic plates**
(**lithog. plate** having heat-sensitive layer containing light-heat-converting material and thermosetting compound and oxygen permeability-controlled layer)

IT Cellophane
(oxygen permeability-controlled layer; **lithog. plate** having heat-sensitive layer containing light-heat-converting material and thermosetting compound and oxygen permeability-controlled layer)

IT Phenolic resins, uses
RL: DEV (Device component use); USES (Uses)
(resol, heat-sensitive layer; **lithog. plate** having heat-sensitive layer containing light-heat-converting material and thermosetting compound and oxygen permeability-controlled layer)

IT 9011-05-6, Beckamine P 138 24979-70-2, Maruka Lyncur PHM C 25068-38-6, Epikote 828 32435-46-4, Kayamer PM 2 54112-23-1, DM 30 60453-84-1, 80MFA 65098-71-7, Denacol EX 421 116675-61-7, Kayasorb IR 820 122985-78-8, Tesazin 3073-60 172451-68-2, Sumilac PC 1 176087-11-9, Gohsenol KL 05
RL: DEV (Device component use); USES (Uses)
(heat-sensitive layer; **lithog. plate** having heat-sensitive layer containing light-heat-converting material and thermosetting compound and oxygen permeability-controlled layer)

IT 24980-58-3, Acrylic acid-vinyl acetate copolymer
RL: DEV (Device component use); USES (Uses)
(hydrophilic swelling layer; **lithog. plate** having heat-sensitive layer containing light-heat-converting material and thermosetting compound and oxygen permeability-controlled layer)

IT 9003-20-7D, Polyvinyl acetate, hydrolyzed
RL: DEV (Device component use); USES (Uses)
(**lithog. plate** having heat-sensitive layer containing light-heat-converting material and thermosetting compound and oxygen permeability-controlled layer)

IT 9002-85-1, Poly(vinylidene chloride) 9002-89-5, Gohsenol N 300 24937-78-8, Ethylene-vinyl acetate copolymer 122391-72-4, Gohsenol GM 14 211107-61-8, Barrialon LF
RL: DEV (Device component use); USES (Uses)
(oxygen permeability-controlled layer; **lithog. plate** having heat-sensitive layer containing light-heat-converting material and thermosetting compound and oxygen permeability-controlled layer)

IT 9003-55-8
RL: DEV (Device component use); USES (Uses)
(styrene-butadiene rubber, JSR 0548, hydrophilic swelling

layer; **lithog. plate** having heat-sensitive layer containing light-heat-converting material and thermosetting compound and oxygen permeability-controlled layer)

L49 ANSWER 24 OF 32 HCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 1999:819308 HCAPLUS
DOCUMENT NUMBER: 132:71387
TITLE: Thermal imaging material for **lithographic plate** preparation
INVENTOR(S): Shimazu, Ken-ichi; Patel, Jayanti; Saraiya, Shashikant; Merchant, Nishith; Savariar-Hauck, Celin; Timpe, Hans-joachim; McCullough, Christopher D.
PATENT ASSIGNEE(S): Kodak Polychrome Graphics Llc, USA
SOURCE: PCT Int. Appl., 25 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 6
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9967097	A2	19991229	WO 1999-US12689	1999 0608
W: JP				
RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
US 6352812	B1	20020305	US 1999-301866	1999 0429
EP 1011970	A2	20000628	EP 1999-928429	1999 0608
EP 1011970	B1	20060208		
R: ES, IT, NL, SE				
JP 2002518715	T2	20020625	JP 2000-555763	1999 0608
EP 1506856	A2	20050216	EP 2004-78162	1999 0608
EP 1506856	A3	20050330		
R: BE, DE, ES, FR, GB, IT, NL, SE				
EP 1506857	A2	20050216	EP 2004-78163	1999 0608
EP 1506857	A3	20050330		
R: BE, DE, ES, FR, GB, IT, NL, SE				

PRIORITY APPLN. INFO.:		
US 1998-90300P	P	1998 0623
US 1999-301866	A	1999 0429
EP 1999-928429	A3	1999 0608
WO 1999-US12689	W	1999

AB A thermal imaging material which can be imaged by imagewise exposure with an IR laser or a thermal head and suited for **lithog. plate** preparation comprises a hydrophilic substrate and a two-layer coating. The first layer of the coating comprises an aqueous solution-developable polymer mixture containing a photothermal conversion material which is contiguous to the hydrophilic substrate. The second layer of the coating comprises one or more non-aqueous solution-soluble polymers which are soluble or dispersible in a solvent which does not dissolve the first layer. The material is exposed with an IR laser or a thermal head and upon development of the imaged material in an aqueous solution, the exposed portions are removed exposing hydrophilic substrate surfaces receptive to conventional aqueous fountain solns. The unexposed portions contain ink-receptive image areas. The second layer may also contain a photothermal conversion material.

IT **9004-38-0**, Cellulose acetate phthalate
RL: TEM (Technical or engineered material use); USES (Uses)
(IR-laser-**sensitive thermal** imaging materials for **lithog. plate** preparation with polymer layers containing)

RN 9004-38-0 HCAPLUS

CN Cellulose, acetate hydrogen 1,2-benzenedicarboxylate (9CI) (CA INDEX NAME)

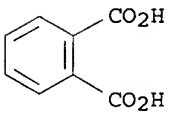
CM 1

CRN 9004-34-6
CMF Unspecified
CCI PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

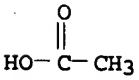
CM 2

CRN 88-99-3
CMF C8 H6 O4



CM 3

CRN 64-19-7
CMF C2 H4 O2



IT **58748-38-2**
RL: TEM (Technical or engineered material use); USES (Uses)
(National Starch 28-2930; IR-laser-**sensitive thermal** imaging materials for **lithog. plate** preparation with polymer layers containing)

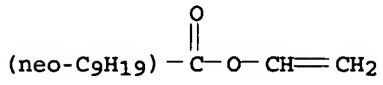
RN 58748-38-2 HCAPLUS

CN Neodecanoic acid, ethenyl ester, polymer with 2-butenoic acid and

ethenyl acetate (9CI) (CA INDEX NAME)

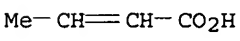
CM 1

CRN 51000-52-3
CMF C12 H22 O2
CCI IDS



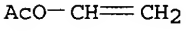
CM 2

CRN 3724-65-0
CMF C4 H6 O2



CM 3

CRN 108-05-4
CMF C4 H6 O2



IC ICM B41M
CC 74-6 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
ST IR laser thermal imaging material **lithog plate** prepn
IT **Lithographic plates**
(IR-laser-**sensitive thermal** imaging materials with two polymer layers on hydrophilic substrates for preparation of)
IT Thermal printing materials
(IR-laser-sensitive; with two polymer layers on hydrophilic substrates for **lithog. plate** preparation)
IT Fluoropolymers, uses
RL: TEM (Technical or engineered material use); USES (Uses)
(MP 1100; IR-laser-**sensitive thermal** imaging materials for **lithog. plate** preparation with polymer layers containing)
IT Phenolic resins, uses
RL: TEM (Technical or engineered material use); USES (Uses)
(PN 430, SD 140; IR-laser-**sensitive thermal** imaging materials for **lithog. plate** preparation with polymer layers containing)
IT Carbon black, uses
RL: TEM (Technical or engineered material use); USES (Uses)
(Special Black 250; IR-laser-**sensitive thermal** imaging materials for **lithog. plate** preparation with polymer layers containing)
IT Polyvinyl acetals
RL: TEM (Technical or engineered material use); USES (Uses)
(carboxy-containing, T 71; IR-laser-**sensitive thermal** imaging materials for **lithog. plate** preparation with polymer layers containing)

IT Polyvinyl acetals
RL: TEM (Technical or engineered material use); USES (Uses)
(dimethylmaleimido-containing, AK 128; IR-laser-**sensitive** **thermal** imaging materials for **lithog.** **plate** preparation with polymer layers containing)
IT Recording materials
(**thermal**, IR-laser-**sensitive**; with two polymer layers on hydrophilic substrates for **lithog.** **plate** preparation)
IT 9011-14-7, Poly(methyl methacrylate)
RL: TEM (Technical or engineered material use); USES (Uses)
(A 21; IR-laser-**sensitive** **thermal** imaging materials for **lithog.** **plate** preparation with polymer layers containing)
IT 9003-53-6, Polystyrene **9004-38-0**, Cellulose acetate phthalate 9004-70-0, E950 9010-88-2, Acryloid B-82 25608-33-7, Acryloid B-66 27029-76-1, PD 140A 58229-85-9, Acryloid B-44 73546-46-0D, reaction products with mesitylenesulfonic acid 106209-33-0, SMA-1000 134127-48-3 253270-56-3, Carboset 500 253272-47-8, Nega 107
RL: TEM (Technical or engineered material use); USES (Uses)
(IR-laser-**sensitive** **thermal** imaging materials for **lithog.** **plate** preparation with polymer layers containing)
IT 9002-84-0
RL: TEM (Technical or engineered material use); USES (Uses)
(MP 1100; IR-laser-**sensitive** **thermal** imaging materials for **lithog.** **plate** preparation with polymer layers containing)
IT **58748-38-2**
RL: TEM (Technical or engineered material use); USES (Uses)
(National Starch 28-2930; IR-laser-**sensitive** **thermal** imaging materials for **lithog.** **plate** preparation with polymer layers containing)
IT 9003-35-4, SD 140
RL: TEM (Technical or engineered material use); USES (Uses)
(PN 430, SD 140; IR-laser-**sensitive** **thermal** imaging materials for **lithog.** **plate** preparation with polymer layers containing)
IT 58206-31-8
RL: TEM (Technical or engineered material use); USES (Uses)
(Scripset 540, Scripset 550; IR-laser-**sensitive** **thermal** imaging materials for **lithog.** **plate** preparation with polymer layers containing)

L49 ANSWER 25 OF 32 HCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 1999:796061 HCAPLUS
DOCUMENT NUMBER: 132:42854
TITLE: Offset printing plate having a high durability
INVENTOR(S): Hauck, Gerhard; Jarek, Mathias; Kesselman, Jerome Philip; Pappas, Socrates Peter
PATENT ASSIGNEE(S): Kodak Polychrome Graphics G.m.b.H., Germany
SOURCE: PCT Int. Appl., 73 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9964930	A1	19991216	WO 1999-DE1673	1999 0607

W: JP, US

RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
DE 19825244	A1	19991216	DE 1998-19825244	1998 0605
EP 1002258	A1	20000524	EP 1999-938142	1999 0607
R: DE, FR, GB, IT, NL				
JP 2002517801	T2	20020618	JP 2000-553867	1999 0607
US 6238831	B1	20010529	US 2000-493837	2000 0128
PRIORITY APPLN. INFO.:			DE 1998-19825244 A	1998 0605
			WO 1999-DE1673 W	1999 0607

AB Offset printing plates having a high durability are composed of a suitable support coated with a pos.- or neg.-working, or electrophotog.-working radiation-sensitive composition containing an alkali solution-insol. thermoplastic polymer that is incorporated into the composition using a solvent in which both the radiation-**sensitive** polymer and the **thermoplastic** polymer are soluble and, if necessary, a second solvent in which the radiation-sensitive polymer is soluble but not the thermoplastic polymer and which is less volatile than the first solvent. Upon drying the photosensitive layer contains homogeneously distributed polymer particles which give the resulting exposed and developed plate improved printing durability. Thermoplastics useful in the process are polystyrene, acrylonitrile-styrene polymers, polycarbonate, poly(Me methacrylate) PVC, polymethylpentene, acrylonitrile-butadiene-styrene copolymer and polysulfone.

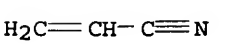
IT **24980-16-3**
RL: TEM (Technical or engineered material use); USES (Uses)
(particles; offset printing plate with printing layer having high durability)

RN 24980-16-3 HCAPLUS

CN 2-Propenoic acid, polymer with ethenylbenzene and 2-propenenitrile (9CI) (CA INDEX NAME)

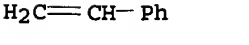
CM 1

CRN 107-13-1
CMF C3 H3 N



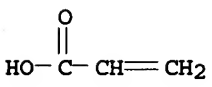
CM 2

CRN 100-42-5
CMF C8 H8



CM 3

CRN 79-10-7
CMF C3 H4 O2



IC ICM G03F007-023
ICS G03F007-032; G03F007-021; G03F007-004
CC 74-6 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
IT **Lithographic plates**
(offset; with **printing** layer having high durability)
IT 9002-86-2, Polyvinyl chloride 9003-56-9, Lustran 452 9011-14-7, Plexigum m914 9016-80-2, Polymethylpentene 24936-68-3, Makrolon 3108, uses **24980-16-3** 25135-51-7, Udel P1800
RL: TEM (Technical or engineered material use); USES (Uses)
(particles; offset printing plate with printing layer having high durability)
REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L49 ANSWER 26 OF 32 HCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 1999:249036 HCAPLUS
DOCUMENT NUMBER: 130:259582
TITLE: Method for making **lithographic plate** from **heat-sensitive** imaging element
INVENTOR(S): Deroover, Geert; Vermeersch, Joan; Van Damme, Marc; Inventief, Pietertje
PATENT ASSIGNEE(S): Agfa-Gevaert N.V., Belg.
SOURCE: Eur. Pat. Appl., 12 pp.
CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 908305	A1	19990414	EP 1998-203120	19980916
EP 908305	B1	20011128		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
JP 11194483	A2	19990721	JP 1998-282730	19981005

PRIORITY APPLN. INFO.: EP 1997-203133 A 19971008

AB According to the present invention there is provided a method for making a **lithog. plate** comprising the steps of (a) preparing a **heat-sensitive** imaging element having on a **lithog. plate** base with a hydrophilic surface a first layer including a polymer, **sol**. in an aqueous **alkaline** solution, and a top layer in which the top

layer is sensitive to an IR radiation and is unpenetrable by an alkaline developer containing SiO2 as an silicate, (b) exposing imagewise the **heat-sensitive** imaging element to an IR radiation, and (c) developing the imagewise exposed **heat -sensitive** imaging element with the alkaline developer so that the exposed areas of the top layer and the underlying areas of the first layer are dissolved and the unexposed areas of the first layer remain undissolved characterized in that the top layer includes an IR-absorbing dye.

IT **9003-01-4**, Poly(acrylic acid) **25087-26-7**, Poly(methacrylic acid)
RL: TEM (Technical or engineered material use); USES (Uses)
(IR-**sensitive thermal** recording materials for **lithog. plate** preparation containing)

RN 9003-01-4 HCAPLUS
CN 2-Propenoic acid, homopolymer (9CI) (CA INDEX NAME)

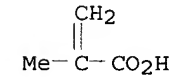
CM 1

CRN 79-10-7
CMF C3 H4 O2

RN 25087-26-7 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, homopolymer (9CI) (CA INDEX NAME)

CM 1

CRN 79-41-4
CMF C4 H6 O2



IC ICM B41C001-10
ICS B41M005-36

CC 74-6 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)

ST **lithog plate heat sensitive** imaging material

IT **Lithographic plates**
(IR-**sensitive thermal** recording materials for preparation of)

IT **Thermal** printing materials
(IR-**sensitive**; for preparation of **lithog. plates**)

IT Phenolic resins, uses
RL: TEM (Technical or engineered material use); USES (Uses)
(novolak; IR-**sensitive thermal** recording materials for **lithog. plate** preparation containing)

IT Recording materials
(**thermal**, IR-**sensitive**; for preparation of **lithog. plates**)

IT **9003-01-4**, Poly(acrylic acid) **25087-26-7**, Poly(methacrylic acid) 221661-30-9
RL: TEM (Technical or engineered material use); USES (Uses)
(IR-**sensitive thermal** recording materials for **lithog. plate** preparation containing)

IT 1344-09-8, Sodium silicate
RL: TEM (Technical or engineered material use); USES (Uses)
(in alkaline developers for IR-**sensitive thermal** recording materials for **lithog. plate** preparation)
REFERENCE COUNT: 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L49 ANSWER 27 OF 32 HCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 1999:184195 HCAPLUS
DOCUMENT NUMBER: 130:215895
TITLE: Thermal **lithographic printing plate**
INVENTOR(S): Nguyen, My T.; Merchant, Nishith; Shimazu, Ken-ichi; Pappas, Peter S.; Hallman, Robert W.; Kesselman, Jerome P.; Savariar-Hauck, Celin; Hauck, Gerhard; Timpe, Hans-Joachim
PATENT ASSIGNEE(S): Kodak Polychrome Graphics LLC, USA
SOURCE: PCT Int. Appl., 22 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9911458	A1	19990311	WO 1998-US16886	1998 0814
W: CA, CN, JP RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
US 6060217	A	20000509	US 1997-922190	1997 0902
EP 939698	A1	19990908	EP 1998-939401	1998 0814
EP 939698	B1	20030924		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				
AT 250497	E	20031015	AT 1998-939401	1998 0814
ES 2206975	T3	20040516	ES 1998-939401	1998 0814
PRIORITY APPLN. INFO.:			US 1997-922190 A	1997 0902
			WO 1998-US16886 W	1998 0814

AB A method for directly imaging a **lithog. printing** surface using IR radiation without the requirement of pre- or post-UV exposure or heat treatment employs a printing plate which contains a support with a hydrophilic surface overcoated with an imaging layer. The imaging layer contains at least one polymer having bonded pendent groups which are hydroxy, carboxylic acid, tert-butyl-oxycarbonyl, sulfonamide, amide, nitrile, urea, or combinations thereof as well as an IR-absorbing compound The

imaging layer may contain a second polymer which has bonded pendent groups which are 1,2-naphthoquinone diazide, hydroxy, carboxylic acid, sulfonamide, hydroxymethyl amide, alkoxymethyl amide, nitrile, maleimide, urea, or combinations thereof. The imaging layer may also contain a visible absorption dye, a solubility inhibiting agent, or both. In practice, the imaging layer is imagewise exposed to IR radiation to produce exposed image areas in the imaged layer which have transient solubility in aqueous alkaline developing solution so that solubility is gradually lost over a period of time until the imaged areas become as insol. as non-imaged areas. Within a short time period of the imaging exposure, the imaged layer is developed with an aqueous alkaline developing solution to form the **lithog. printing** surface. In this method, the IR radiation preferably is laser radiation which is digitally controlled.

IT **9004-38-0**, Cellulose acetate phthalate **26284-14-0**, Methacrylic acid-butyl methacrylate copolymer **55854-33-6**, Butyl methacrylate-2-hydroxyethyl methacrylate-methacrylic acid-styrene copolymer **56793-67-0**, Methacrylic acid-butyl methacrylate-methyl methacrylate-styrene copolymer **58748-38-2**, Resyn 28-2930 **68778-01-8**, Ethyl methacrylate-2-hydroxyethyl methacrylate-methacrylic acid-styrene copolymer **208046-03-1**, Methacrylic acid-N-methoxymethylmethacrylamide-2-phenylethyl methacrylate copolymer
RL: TEM (Technical or engineered material use); USES (Uses)
(IR laser-**sensitive thermal** recording materials for **lithog. plate** preparation containing)

RN 9004-38-0 HCAPLUS
CN Cellulose, acetate hydrogen 1,2-benzenedicarboxylate (9CI) (CA INDEX NAME)

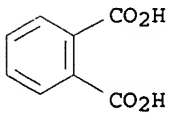
CM 1

CRN 9004-34-6
CMF Unspecified
CCI PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

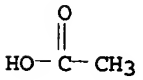
CM 2

CRN 88-99-3
CMF C8 H6 O4



CM 3

CRN 64-19-7
CMF C2 H4 O2

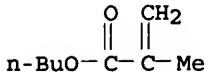


RN 26284-14-0 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, polymer with butyl

2-methyl-2-propenoate (9CI) (CA INDEX NAME)

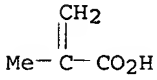
CM 1

CRN 97-88-1
CMF C8 H14 O2



CM 2

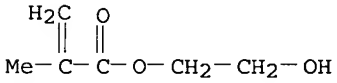
CRN 79-41-4
CMF C4 H6 O2



RN 55854-33-6 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, polymer with butyl 2-methyl-2-propenoate, ethenylbenzene and 2-hydroxyethyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

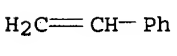
CM 1

CRN 868-77-9
CMF C6 H10 O3



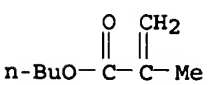
CM 2

CRN 100-42-5
CMF C8 H8



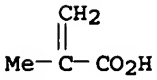
CM 3

CRN 97-88-1
CMF C8 H14 O2



CM 4

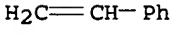
CRN 79-41-4
CMF C4 H6 O2



RN 56793-67-0 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, polymer with butyl 2-methyl-2-propenoate, ethenylbenzene and methyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

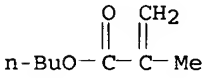
CM 1

CRN 100-42-5
CMF C8 H8



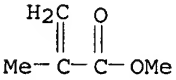
CM 2

CRN 97-88-1
CMF C8 H14 O2



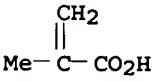
CM 3

CRN 80-62-6
CMF C5 H8 O2



CM 4

CRN 79-41-4
CMF C4 H6 O2

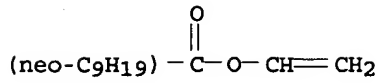


RN 58748-38-2 HCAPLUS
CN Neodecanoic acid, ethenyl ester, polymer with 2-butenoic acid and ethenyl acetate (9CI) (CA INDEX NAME)

CM 1

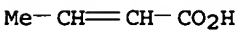
CRN 51000-52-3

CMF C12 H22 O2
CCI IDS



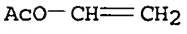
CM 2

CRN 3724-65-0
CMF C4 H6 O2



CM 3

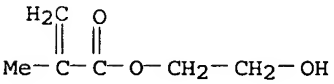
CRN 108-05-4
CMF C4 H6 O2



RN 68778-01-8 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, polymer with ethenylbenzene, ethyl 2-methyl-2-propenoate and 2-hydroxyethyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

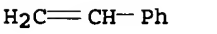
CM 1

CRN 868-77-9
CMF C6 H10 O3



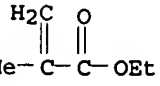
CM 2

CRN 100-42-5
CMF C8 H8



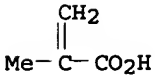
CM 3

CRN 97-63-2
CMF C6 H10 O2



CM 4

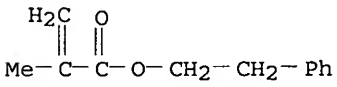
CRN 79-41-4
CMF C4 H6 O2



RN 208046-03-1 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, polymer with N-(methoxymethyl)-2-methyl-2-propenamide and 2-phenylethyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

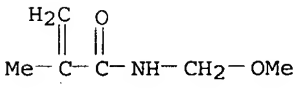
CM 1

CRN 3683-12-3
CMF C12 H14 O2



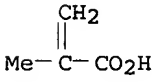
CM 2

CRN 3644-12-0
CMF C6 H11 N O2



CM 3

CRN 79-41-4
CMF C4 H6 O2



IC ICM B41C001-10
ICS B41M005-36; G03F007-004; G03F007-023
CC 74-6 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
ST thermal **lithog plate** IR laser naphthoquinonediazide
IT Phenolic resins, uses
RL: TEM (Technical or engineered material use); USES (Uses)
(Bu ether; IR laser-**sensitive thermal** recording materials for **lithog. plate** preparation containing)
IT **Lithographic plates**
(IR laser-**sensitive thermal** recording

materials containing naphthoquinonediazides for preparation of)
IT Thermal printing materials
(IR laser-sensitive; containing naphthoquinonediazides for preparation of **lithog. plates**)
IT Recording materials
(**thermal**, IR laser-**sensitive**; containing naphthoquinonediazides for preparation of **lithog. plates**)
IT 139301-16-9, CD 1012
RL: TEM (Technical or engineered material use); USES (Uses)
(CD 1012; IR laser-**sensitive thermal** recording materials for **lithog. plate** preparation containing)
IT 2185-86-6, Victoria Blue R 2390-59-2, Ethyl violet 2390-60-5, Victoria Blue BO 5496-71-9, ADS 1060A-IR 9003-35-4D, Phenol-formaldehyde polymer, Bu ether **9004-38-0**, Cellulose acetate phthalate 9016-83-5, SD 140A 14233-37-5, Solvent Blue 36 17354-14-2, Solvent Blue 35 24979-70-2, Poly(4-hydroxystyrene) 24979-71-3, 4-Hydroxystyrene-methyl methacrylate copolymer **26284-14-0**, Methacrylic acid-butyl methacrylate copolymer 26323-01-3 27029-76-1, PD 140A **55854-33-6**, Butyl methacrylate-2-hydroxyethyl methacrylate-methacrylic acid-styrene copolymer **56793-67-0**, Methacrylic acid-butyl methacrylate-methyl methacrylate-styrene copolymer **58748-38-2**, Resyn 28-2930 **68778-01-8**, Ethyl methacrylate-2-hydroxyethyl methacrylate-methacrylic acid-styrene copolymer 161003-85-6, 2-Hydroxyethyl methacrylate-vinylphenol copolymer 181658-68-4, GP 7550 187683-87-0, Epolite IV 62B **208046-03-1**, Methacrylic acid-N-methoxymethylmethacrylamide-2-phenylethyl methacrylate copolymer 220970-43-4, Epolite III 178 220970-44-5, Uravar FN 6 220970-76-3, Spectra IR 830A 220971-24-4, PMP 65 220971-25-5, PMP 92 220971-33-5, ST 798
RL: TEM (Technical or engineered material use); USES (Uses)
(IR laser-**sensitive thermal** recording materials for **lithog. plate** preparation containing)
IT 220937-57-5, Polychrome 3000
RL: TEM (Technical or engineered material use); USES (Uses)
(Polychrome 3000; IR laser-**sensitive thermal** recording materials for **lithog. plate** preparation containing)
REFERENCE COUNT: 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L49 ANSWER 28 OF 32 HCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 1999:184194 HCAPLUS
DOCUMENT NUMBER: 130:244478
TITLE: Chemical processing-free **lithographic printing plate**
INVENTOR(S): Nguyen, My T.; Saraiya, Shashikant; Shimazu, Ken-ichi; Pappas, S. Peter; Natu, Omkar J.; Hallmann, Robert
PATENT ASSIGNEE(S): Kodak Polychrome Graphics Co. Ltd., USA
SOURCE: PCT Int. Appl., 23 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9911457	A1	19990311	WO 1998-US16885	1998

0814
W: CA, CN, JP
RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE
EP 1015244 A1 20000705 EP 1998-939400
1998
0814
EP 1015244 B1 20020313
R: DE, FR, GB
PRIORITY APPLN. INFO.: US 1997-922714 A
1997
0902
WO 1998-US16885 W
1998
0814

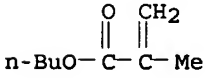
AB A **lithog. printing plate** is prepared using a thermosensitive material which requires no chemical development to remove areas of the imaged thermosensitive material. The thermosensitive material comprises a sheet substrate, a porous, aluminosilicate hydrophilic layer on the sheet substrate, and a porous, thermally reactive imaging layer on the hydrophilic layer. The imaging layer is imaged using an IR laser to produce an imaged layer. The imaged layer is treated with a conditioner liquid to produce a porous, planar, **lithog. printing** surface. By this method, the thermosensitive material can be digitally imaged by an IR laser so that the imaged areas become receptive to inks and the non-image areas repel ink after simple treatment with a conditioner such as a fountain solution containing an amphoteric surfactant.

IT **26284-14-0**, Butyl methacrylate-methacrylic acid copolymer **55854-33-6**, Butyl methacrylate-2-hydroxyethyl methacrylate-methacrylic acid-styrene copolymer **56793-67-0**, Butyl methacrylate-methacrylic acid-methyl methacrylate-styrene copolymer **68778-01-8**, Ethyl methacrylate-2-hydroxyethyl methacrylate-methacrylic acid-styrene copolymer **208046-03-1**, N-Methoxymethylmethacrylamide-methacrylic acid-2-phenylethyl methacrylate copolymer
RL: TEM (Technical or engineered material use); USES (Uses)
(IR laser-**sensitive thermosensitive** materials for **lithog. plate** preparation containing)

RN 26284-14-0 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, polymer with butyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

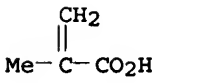
CM 1

CRN 97-88-1
CMF C8 H14 O2



CM 2

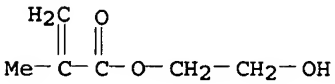
CRN 79-41-4
CMF C4 H6 O2



RN 55854-33-6 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, polymer with butyl 2-methyl-2-propenoate, ethenylbenzene and 2-hydroxyethyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

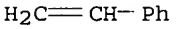
CM 1

CRN 868-77-9
CMF C6 H10 O3



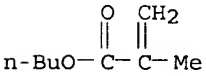
CM 2

CRN 100-42-5
CMF C8 H8



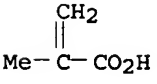
CM 3

CRN 97-88-1
CMF C8 H14 O2



CM 4

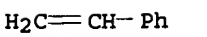
CRN 79-41-4
CMF C4 H6 O2



RN 56793-67-0 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, polymer with butyl 2-methyl-2-propenoate, ethenylbenzene and methyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

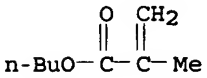
CM 1

CRN 100-42-5
CMF C8 H8



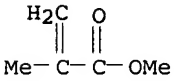
CM 2

CRN 97-88-1
CMF C8 H14 O2



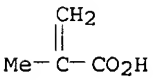
CM 3

CRN 80-62-6
CMF C5 H8 O2



CM 4

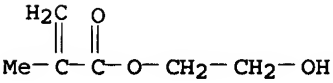
CRN 79-41-4
CMF C4 H6 O2



RN 68778-01-8 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, polymer with ethenylbenzene, ethyl 2-methyl-2-propenoate and 2-hydroxyethyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

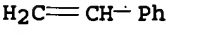
CM 1

CRN 868-77-9
CMF C6 H10 O3



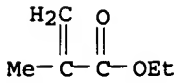
CM 2

CRN 100-42-5
CMF C8 H8



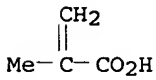
CM 3

CRN 97-63-2
CMF C6 H10 O2



CM 4

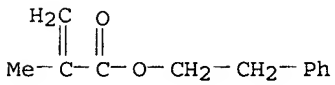
CRN 79-41-4
CMF C4 H6 O2



RN 208046-03-1 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, polymer with N-(methoxymethyl)-2-methyl-2-propenamide and 2-phenylethyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

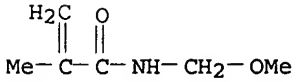
CM 1

CRN 3683-12-3
CMF C12 H14 O2



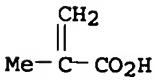
CM 2

CRN 3644-12-0
CMF C6 H11 N O2



CM 3

CRN 79-41-4
CMF C4 H6 O2



IC ICM B41C001-10
ICS B41N001-00; B41M005-36

CC 74-6 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
ST IR laser thermosensitive material **lithog plate**
IT Aluminosilicates, uses
RL: TEM (Technical or engineered material use); USES (Uses)
(IR laser-**sensitive thermosensitive** materials for **lithog. plate** preparation containing)
IT Thermal **printing** materials
(IR laser-sensitive; for **lithog. plate** preparation without chemical processing)
IT **Lithographic plates**
(chemical processing-free IR laser-**sensitive thermosensitive** materials for preparation of)
IT Recording materials
(**thermal**, IR laser-**sensitive**; for **lithog. plate** preparation without chemical processing)
IT 221136-64-7, ACR 1290
RL: TEM (Technical or engineered material use); USES (Uses)
(ACR 1290; IR laser-**sensitive thermosensitive** materials for **lithog. plate** preparation containing)
IT 139301-16-9
RL: TEM (Technical or engineered material use); USES (Uses)
(CD 1012; IR laser-**sensitive thermosensitive** materials for **lithog. plate** preparation containing)
IT 11114-17-3, FC430 17354-14-2, Solvent Blue 35 24979-70-2, Poly(4-hydroxystyrene) 24979-71-3, 4-Hydroxystyrene-methyl methacrylate copolymer **26284-14-0**, Butyl methacrylate-methacrylic acid copolymer 26355-01-1, 2-Hydroxyethyl methacrylate-methyl methacrylate copolymer **55854-33-6**, Butyl methacrylate-2-hydroxyethyl methacrylate-methacrylic acid-styrene copolymer **56793-67-0**, Butyl methacrylate-methacrylic acid-methyl methacrylate-styrene copolymer 66218-25-5, Cyclohexyl methacrylate-2-hydroxyethyl methacrylate copolymer **68778-01-8**, Ethyl methacrylate-2-hydroxyethyl methacrylate-methacrylic acid-styrene copolymer 161003-85-6, 2-Hydroxyethyl methacrylate-vinylphenol copolymer **208046-03-1**, N-Methoxymethylmethacrylamide-methacrylic acid-2-phenylethyl methacrylate copolymer 220970-76-3, Spectra IR 830A 221136-69-2 221314-33-6, GPRI 7550 221314-35-8, Spectra IR 1060A
RL: TEM (Technical or engineered material use); USES (Uses)
(IR laser-**sensitive thermosensitive** materials for **lithog. plate** preparation containing)
REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L49 ANSWER 29 OF 32 HCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 1997:480904 HCAPLUS
DOCUMENT NUMBER: 127:115324
TITLE: A heat-sensitive imaging element and a method for producing **lithographic plates** therewith
INVENTOR(S): Van Damme, Marc; Vermeersch, Joan
PATENT ASSIGNEE(S): Agfa-Gevaert Naamloze Vennootschap, Belg.
SOURCE: Eur. Pat. Appl., 14 pp.
CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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EP 779161	A1	19970618	EP 1995-203494	1995 1214
EP 779161	B1	20000705		
R: DE, FR, GB				
US 6010817	A	20000104	US 1996-762441	1996 1209
JP 09185162	A2	19970715	JP 1996-351789	1996 1212
JP 2901235	B2	19990607		
PRIORITY APPLN. INFO.:			EP 1995-203494 A	1995 1214

AB According to the present invention there is provided a heat-sensitive imaging element comprising a support having a hydrophilic surface contiguous to the hydrophilic surface of a support a hydrophobic heat-sensitive composition comprising a hydrophobic polymer binder, a compound capable of converting light into heat, and a reactive compound or mixture of reactive compds. present in an amount which surpasses the absorptive capacity of the hydrophobic polymer binder for the compound or mixture of compds., the reactive compound or mixture of compds. being reactive under the influence of heat or under the influence of a reagent which is obtained by decomposition of a heat-sensitive compound one or more thermo-adhesive layers, at least one of the thermo-adhesive layers being contiguous to the hydrophobic heat-sensitive composition

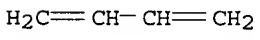
IT **25085-39-6**, Acrylic acid-butadiene-styrene copolymer
RL: TEM (Technical or engineered material use); USES (Uses)
(lithog. plate manufacture using laser-
sensitive thermal imaging materials containing)

RN 25085-39-6 HCAPLUS

CN 2-Propenoic acid, polymer with 1,3-butadiene and ethenylbenzene (9CI) (CA INDEX NAME)

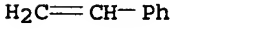
CM 1

CRN 106-99-0
CMF C4 H6



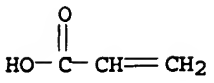
CM 2

CRN 100-42-5
CMF C8 H8



CM 3

CRN 79-10-7
CMF C3 H4 O2



IC ICM B41M005-34
ICS B41C001-10; B41M005-40; B41M005-36
CC 74-7 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
ST thermal imaging compn **lithog plate**; thermoadhesive compn **lithog plate** prepn
IT Aminoplasts
RL: TEM (Technical or engineered material use); USES (Uses)
(**lithog. plate** manufacture using laser-**sensitive thermal** imaging materials containing)
IT Recording materials
(thermal, thermoadhesive; for **lithog. plate** manufacture)
IT **Lithographic plates**
(thermoadhesive imaging compns. for manufacture of)
IT 557-75-5, Vinyl alcohol, uses 681-84-5D, Tetramethylorthosilicate, hydrolyzed 9003-08-1, Cymel 301 9052-61-3, Butadiene-vinyltoluene copolymer 23235-61-2, Ditrimethylolpropane **25085-39-6**, Acrylic acid-butadiene-styrene copolymer 60506-81-2, Dipentaerythritol pentaacrylate 74227-35-3, Degacure KI 85
RL: TEM (Technical or engineered material use); USES (Uses)
(**lithog. plate** manufacture using laser-**sensitive thermal** imaging materials containing)

L49 ANSWER 30 OF 32 HCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 1997:457208 HCAPLUS
DOCUMENT NUMBER: 127:88088
TITLE: Donor elements and processes for thermal dye transfer by laser
INVENTOR(S): Blanchet-Fincher, Graciela Beatriz
PATENT ASSIGNEE(S): E. I. Du Pont de Nemours & Co., USA
SOURCE: PCT Int. Appl., 69 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9720252	A1	19970605	WO 1996-US18970	1996 1127
W: JP				
RW: AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
EP 864118	A1	19980916	EP 1996-942074	1996 1127
EP 864118	B1	20000816		
R: DE, FR, GB, IT				
JP 2002517163	T2	20020611	JP 1997-520641	1996 1127
JP 3421054	B2	20030630		

PRIORITY APPLN. INFO.: US 1995-564546 A 1995 1129

US 1996-757717 A 1996 1126

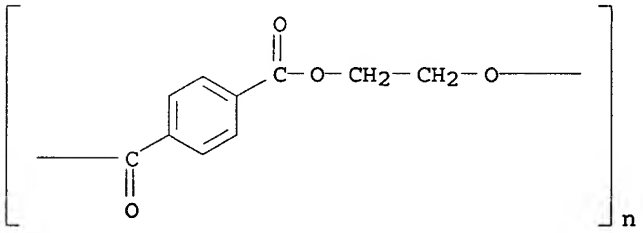
WO 1996-US18970 W 1996 1127

AB Donor elements, assemblages, and associated processes are described for use in a laser-induced thermal transfer process, said elements comprising in the order listed (a) at least one flexible ejection layer comprising a first polymer having a decomposition temperature T1 and characteristic glass transition temps. of Tg0 and Tg1 for unplasticized and plasticized polymer samples, resp., wherein the tensile modulus of the flexible ejection layer(s) structure is less than or equal to 2.5 Gigapascals, (b) at least one heating layer, (c) at least one transfer layer comprising (i) a second polymer having a decomposition temperature T2, wherein T2≥(T1 + 100) and (ii) an imageable component, with the proviso in some embodiments that an inflexible support substrate is absent in the donor element at least during the thermal transfer process or in other embodiments that a support is absent in the donor element at least during the thermal transfer process. These donor elements are useful in proofing and **lithog. printing** applications. Assemblages made with these donor elements are useful for fabrication of photomasks on various photohardenable materials, including flexog. printing plates and photoresists. These photomasks are useful in creating a relief image with a photosensitive element, such as flexog. printing plate or a photoresist.

IT **25038-59-9**, Poly(ethylene terephthalate), uses
RL: TEM (Technical or engineered material use); USES (Uses)
(laser-sensitive dye donor elements for thermal transfer process containing)

RN 25038-59-9 HCAPLUS

CN Poly(oxy-1,2-ethanediyloxycarbonyl-1,4-phenylenecarbonyl) (9CI) (CA INDEX NAME)



IC ICM G03C001-498
ICS G03F001-12

CC 74-6 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)

IT **Thermal**-transfer printing
(laser-**sensitive** dye donor elements for)

IT **Lithographic plates**
Photomasks (lithographic masks)
Photoresists
(laser-sensitive dye donor elements for thermal transfer process for preparation of)

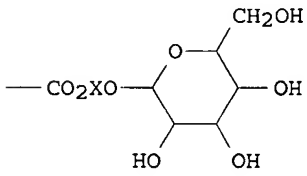
IT 84-62-8, Diphenyl phthalate 347-46-6, 4-Diazo-N,N-diethylaniline fluoroborate 6427-66-3, p-Azidobenzoic acid 9002-86-2, Poly(vinyl chloride) 9002-86-2D, Poly(vinyl chloride), chlorinated 9011-14-7, Poly(methyl methacrylate)

25038-59-9, Poly(ethylene terephthalate), uses
25750-84-9, Butyl acrylate-ethylene copolymer 151853-78-0,
Elvacite AB 1030
RL: TEM (Technical or engineered material use); USES (Uses)
(laser-sensitive dye donor elements for thermal transfer process containing)

L49 ANSWER 31 OF 32 HCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 1995:993000 HCAPLUS
DOCUMENT NUMBER: 124:160426
TITLE: **Lithographic plate** utilizing silver complex diffusion-transfer process
INVENTOR(S): Haino, Kozo; Miura, Taketoshi; Yamano, Genzo
PATENT ASSIGNEE(S): Mitsubishi Paper Mills Ltd, Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 7 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 07253671	A2	19951003	JP 1994-45402	1994 0316
PRIORITY APPLN. INFO.:			JP 1994-45402	1994 0316

GI



Q

AB The plate comprises a support successively coated with a Ag halide emulsion layer and a layer containing phys. developing nuclei and a polymeric binder (CH2CR1Q)l[CH2CR2(CONH2)]mAn [R1, R2 = H, lower alkyl; X = divalent linking group; A = ethylenic unsatd. monomer; l = 10-100; m = 0-90; Q = I; n = 100-(l+m) mol%]. The plate shows high **sensitivity** and good **thermal** stability and gives stain-free images.

IT **173369-77-2**
RL: DEV (Device component use); USES (Uses)
(silver salt diffusion-transfer **lithog. plate** containing glucosylamino polymer binder)

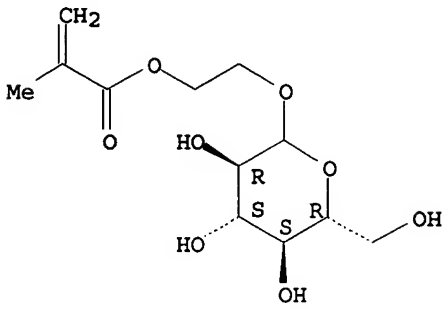
RN 173369-77-2 HCAPLUS
CN D-Glucopyranoside, 2-[(2-methyl-1-oxo-2-propenyl)oxy]ethyl, polymer with 2-propenamide and 2-propenoic acid (9CI) (CA INDEX NAME)

CM 1

CRN 132153-62-9

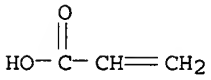
CMF C12 H20 O8

Absolute stereochemistry.



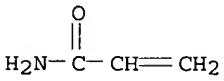
CM 2

CRN 79-10-7
CMF C3 H4 O2



CM 3

CRN 79-06-1
CMF C3 H5 N O



IC ICM G03F007-07
CC 74-6 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
Section cross-reference(s): 38
ST silver complex diffusion transfer **lithog printing**; glucosyl amino polymer binder **lithog plate**
IT **Lithographic plates**
(silver salt diffusion-transfer **lithog. plate** containing glucosylamino polymer binder)
IT 132153-84-5 **173369-77-2** 173369-78-3 173369-79-4 173369-80-7 173369-81-8
RL: DEV (Device component use); USES (Uses)
(silver salt diffusion-transfer **lithog. plate** containing glucosylamino polymer binder)
IT 132153-69-6P
RL: DEV (Device component use); IMF (Industrial manufacture); PREP (Preparation); USES (Uses)
(silver salt diffusion-transfer **lithog. plate** containing glucosylamino polymer binder)

L49 ANSWER 32 OF 32 HCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 1993:158009 HCAPLUS
DOCUMENT NUMBER: 118:158009

TITLE: Curable, heat-activatable transfer toner
INVENTOR(S): Held, Robert Paul
PATENT ASSIGNEE(S): du Pont de Nemours, E. I., and Co., USA
SOURCE: Eur. Pat. Appl., 14 pp.
CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 501397	A1	19920902	EP 1992-103117	1992 0225
EP 501397 R: DE, FR, GB, IT	B1	19981111		
US 5240814	A	19930831	US 1991-661986	1991 0227
CA 2061672	AA	19920828	CA 1992-2061672	1992 0221
JP 05072726	A2	19930326	JP 1992-41739	1992 0227
JP 2697991	B2	19980119		

PRIORITY APPLN. INFO.: US 1991-661986 A 1991 0227

OTHER SOURCE(S): MARPAT 118:158009

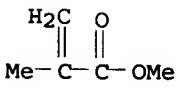
AB The title toner comprises an organic thermoplastic polymer containing acid groups, a plasticizer, and a crosslinking agent selected from Mn+(RCOCHCO-R1)n-j.Xj [M = metal; R, R1 = alkyl, aryl; n = valency of metal; j = 0-(n-1); X = OH, Cl, F, sulfate, nitrate, chlorate, phosphate, acetate, alkyl carboxylate, aryl carboxylate], Mn+(R)n, Mn+(CO2R1)n, and Mn+(OR2)n [R, R1, R2 = hydrocarbyl; M = metal; n = valency of metal (≥2)]. A process for forming an image with the above toner comprises applying the toner on a latent image, heating, contacting with a receptor, separating the element, and heating the separated image. The toner has prolonged tack and is nonelectroscopic.

IT **25322-25-2**, Acrylic acid-methyl methacrylate copolymer
52831-04-6 65616-75-3
RL: USES (Uses)
(heat-sensitive toners containing)

RN 25322-25-2 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, methyl ester, polymer with 2-propenoic acid (9CI) (CA INDEX NAME)

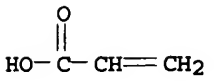
CM 1

CRN 80-62-6
CMF C5 H8 O2



CM 2

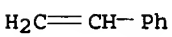
CRN 79-10-7
CMF C3 H4 O2



RN 52831-04-6 HCAPLUS
CN 2-Propenoic acid, polymer with ethenylbenzene and (1-methylethenyl)benzene (9CI) (CA INDEX NAME)

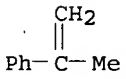
CM 1

CRN 100-42-5
CMF C8 H8



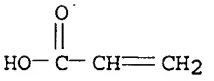
CM 2

CRN 98-83-9
CMF C9 H10



CM 3

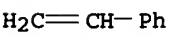
CRN 79-10-7
CMF C3 H4 O2



RN 65616-75-3 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, polymer with ethenylbenzene and (1-methylethenyl)benzene (9CI) (CA INDEX NAME)

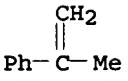
CM 1

CRN 100-42-5
CMF C8 H8



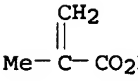
CM 2

CRN 98-83-9
CMF C9 H10



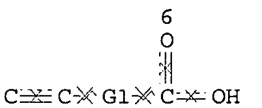
CM 3

CRN 79-41-4
CMF C4 H6 O2



IC ICM G03F007-28
CC 74-7 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
ST heat **sensitive** toner **thermog**; nonelectroscopic toner prolonged tack
IT **Lithographic plates**
(preparation of, heat-sensitive toners for)
IT **25322-25-2**, Acrylic acid-methyl methacrylate copolymer
52831-04-6 65616-75-3
RL: USES (Uses)
(heat-sensitive toners containing)

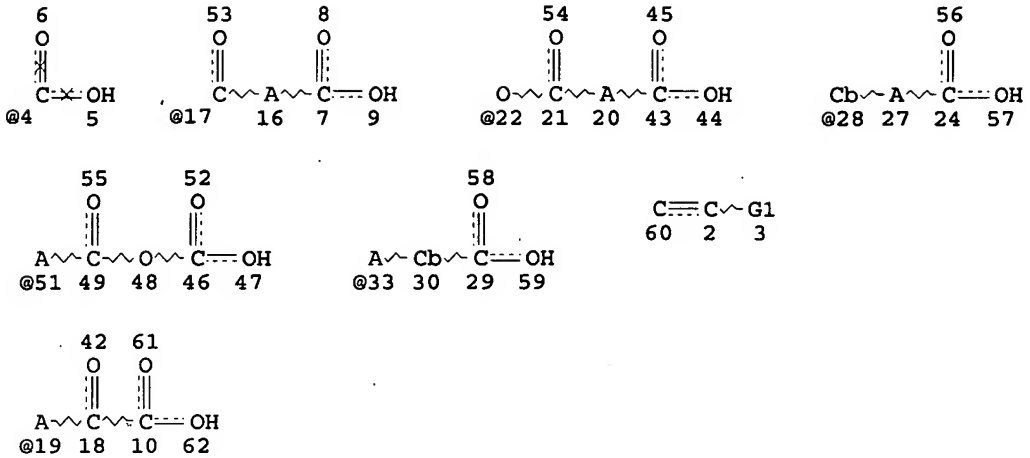
=> => d que stat l64
L5 5651 SEA FILE=HCAPLUS ABB=ON PLU=ON LITHOG?(3A)PRINT?(3A)P
LATE
L20 STR



REP G1=(0-1) A
NODE ATTRIBUTES:
DEFAULT MLEVEL IS ATOM
DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:
RING(S) ARE ISOLATED OR EMBEDDED
NUMBER OF NODES IS 6

STEREO ATTRIBUTES: NONE
L21 SCR 2043
L23 188824 SEA FILE=REGISTRY SSS FUL L20 AND L21
L31 6675 SEA FILE=HCAPLUS ABB=ON PLU=ON ALKALINE?(5A)SOLUBLE
L34 14097 SEA FILE=HCAPLUS ABB=ON PLU=ON LITHOG?(5A)PLATE
L35 8756 SEA FILE=HCAPLUS ABB=ON PLU=ON LITHOG?(5A)PRINT?
L39 57182 SEA FILE=HCAPLUS ABB=ON PLU=ON (WATER? OR H2O OR AQUEOUS)(5A)INSOL?
L56 STR



VAR G1=4/17/19/28/33/22/51
NODE ATTRIBUTES:
NSPEC IS RC AT 17
CONNECT IS E2 RC AT 16
CONNECT IS E2 RC AT 19
CONNECT IS E2 RC AT 20
CONNECT IS E2 RC AT 51
DEFAULT MLEVEL IS ATOM
GGCAT IS UNS AT 28
GGCAT IS UNS AT 30
DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:
RING(S) ARE ISOLATED OR EMBEDDED
NUMBER OF NODES IS 42

STEREO ATTRIBUTES: NONE
L58 119401 SEA FILE=REGISTRY SUB=L23 SSS FUL L56
L59 152835 SEA FILE=HCAPLUS ABB=ON PLU=ON L58
L60 2886 SEA FILE=HCAPLUS ABB=ON PLU=ON L59 AND (L5 OR L34 OR L35)
L63 118 SEA FILE=HCAPLUS ABB=ON PLU=ON L60 AND L39
L64 21 SEA FILE=HCAPLUS ABB=ON PLU=ON L63 AND L31

=> d l64 1-21 ibib abs hitstr hitind

L64 ANSWER 1 OF 21 HCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2006:32221 HCAPLUS
DOCUMENT NUMBER: 144:78015
TITLE: Platemaking of silver salt diffusion-transfer **lithographic plate** using developer containing polymer
INVENTOR(S): Takagami, Yuji; Fujioka, Hajime
PATENT ASSIGNEE(S): Mitsubishi Paper Mills, Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 11 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE

JP 2006011207 A2 20060112 JP 2004-190972
2004
0629

PRIORITY APPLN. INFO.: JP 2004-190972
2004
0629

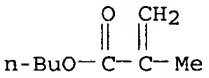
AB The plate, comprising Al support coated with a phys. development nucleus layer and a Ag halide emulsion layer, is processed by (1) a developer containing a polymer **insol.** in **water** and **soluble** in **alkaline** solution, and (2) washing water. The plate shows good water resistance, printing durability, and ink receptivity.

IT **26284-14-0**, Butyl methacrylate-methacrylic acid copolymer
163255-38-7, Benzyl methacrylate-butyl methacrylate-methacrylic acid copolymer
RL: MOA (Modifier or additive use); TEM (Technical or engineered material use); USES (Uses)
(platemaking of silver salt diffusion-transfer **lithog** . **plate** using developer containing polymer)

RN 26284-14-0 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, polymer with butyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

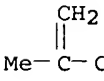
CM 1

CRN 97-88-1
CMF C8 H14 O2



CM 2

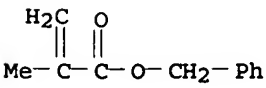
CRN 79-41-4
CMF C4 H6 O2



RN 163255-38-7 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, polymer with butyl 2-methyl-2-propenoate and phenylmethyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

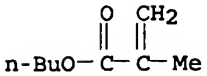
CM 1

CRN 2495-37-6
CMF C11 H12 O2



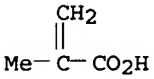
CM 2

CRN 97-88-1
CMF C8 H14 O2



CM 3

CRN 79-41-4
CMF C4 H6 O2



CC 74-6 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
ST silver salt diffusion transfer **lithog plate** developer; alkali soluble polymer developer **lithog plate**
IT **Lithographic plates**
(diffusion-transfer; platemaking of silver salt diffusion-transfer **lithog. plate** using developer containing polymer)
IT **26284-14-0**, Butyl methacrylate-methacrylic acid copolymer **163255-38-7**, Benzyl methacrylate-butyl methacrylate-methacrylic acid copolymer
RL: MOA (Modifier or additive use); TEM (Technical or engineered material use); USES (Uses)
(platemaking of silver salt diffusion-transfer **lithog. plate** using developer containing polymer)

L64 ANSWER 2 OF 21 HCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2006:10481 HCAPLUS
DOCUMENT NUMBER: 144:78000
TITLE: **Lithographic printing plate** precursors for direct IR-laser platemaking
INVENTOR(S): Tashiro, Hiroshi
PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 45 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2006003658	A2	20060105	JP 2004-180117	2004 0617

PRIORITY APPLN. INFO.: JP 2004-180117 2004 0617

AB The precursor comprises, on a support, ≥2-tier pos.-working imaging layers each layer containing an IR absorbent and increasing solubility to aqueous alkaline developers upon IR laser exposure, wherein the

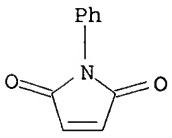
imaging layer nearest the support has a disperse system and contains ≥2 kinds of polymers. At least one of the polymers constituting the disperse system is prepared by using maleimide (derivative) monomers. Preferably, the matrix phases are made of **water-insol.** polymers being **soluble** to **aqueous alkaline** solns., while the disperse phases contain compds. generating acids or radicals upon IR radiation or compds. changing their solubility to bases upon IR radiation. The imaging layer show high discrimination property in development to give printing face with high printing durability.

IT **743430-28-6P**, Acrylamide-acrylonitrile-methacrylic acid-N-phenylmaleimide copolymer **743430-29-7P** **871941-56-9P**
RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(in bottommost imaging layer showing disperse system; **lithog. printing plate** precursor for direct IR-laser platemaking)

RN 743430-28-6 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, polymer with 1-phenyl-1H-pyrrole-2,5-dione, 2-propenamide and 2-propenenitrile (9CI) (CA INDEX NAME)

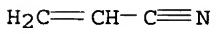
CM 1

CRN 941-69-5
CMF C10 H7 N O2



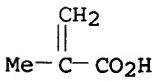
CM 2

CRN 107-13-1
CMF C3 H3 N



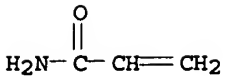
CM 3

CRN 79-41-4
CMF C4 H6 O2



CM 4

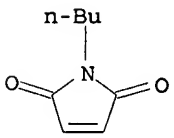
CRN 79-06-1
CMF C3 H5 N O



RN 743430-29-7 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, polymer with 1-butyl-1H-pyrrole-2,5-dione, 2-cyanoethyl 2-propenoate and 2-propenamide (9CI) (CA INDEX NAME)

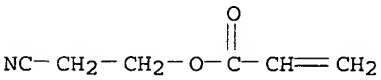
CM 1

CRN 2973-09-3
CMF C8 H11 N O2



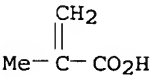
CM 2

CRN 106-71-8
CMF C6 H7 N O2



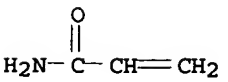
CM 3

CRN 79-41-4
CMF C4 H6 O2



CM 4

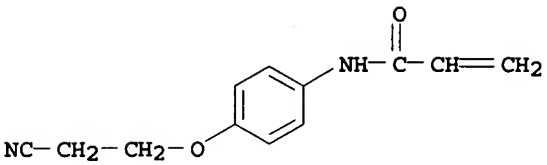
CRN 79-06-1
CMF C3 H5 N O



RN 871941-56-9 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, polymer with 1-butyl-1H-pyrrole-2,5-dione and N-[4-(2-cyanoethoxy)phenyl]-2-propenamide (9CI) (CA INDEX NAME)

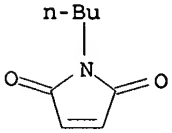
CM 1

CRN 871941-55-8
CMF C12 H12 N2 O2



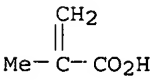
CM 2

CRN 2973-09-3
CMF C8 H11 N O2



CM 3

CRN 79-41-4
CMF C4 H6 O2



CC 74-6 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
Section cross-reference(s): 38

ST pos IR platemaking **lithog plate** maleimide copolymer; dispersion system **lithog plate** precursor maleimide copolymer; acrylonitrile maleimide copolymer pos IR platemaking **lithog plate**

IT Polyoxyalkylenes, uses
RL: TEM (Technical or engineered material use); USES (Uses)
(acrylic, graft, in imaging layers showing disperse system; **lithog. printing plate** precursor for direct IR-laser platemaking)

IT Phenolic resins, uses
RL: TEM (Technical or engineered material use); USES (Uses)
(novolak, cresol-based, in upper imaging layer showing disperse system; **lithog. printing plate** precursor for direct IR-laser platemaking)

IT Phenolic resins, uses
RL: TEM (Technical or engineered material use); USES (Uses)
(novolak, in bottommost imaging layer showing disperse system; **lithog. printing plate** precursor for direct IR-laser platemaking)

IT 134127-48-3
RL: TEM (Technical or engineered material use); USES (Uses)
(IR absorbent, in imaging layers showing disperse system; **lithog. printing plate** precursor for direct IR-laser platemaking)

IT **743430-28-6P**, Acrylamide-acrylonitrile-methacrylic acid-N-phenylmaleimide copolymer **743430-29-7P** **871941-56-9P** 871941-57-0P
RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(in bottommost imaging layer showing disperse system; **lithog. printing plate** precursor for direct IR-laser platemaking)

IT 100347-03-3, m-Cresol-p-cresol-formaldehyde-2,3-xylenol copolymer
RL: TEM (Technical or engineered material use); USES (Uses)
(in bottommost imaging layer showing disperse system; **lithog. printing plate** precursor for direct IR-laser platemaking)

IT 657429-11-3
RL: TEM (Technical or engineered material use); USES (Uses)
(in imaging layers showing disperse system; **lithog. printing plate** precursor for direct IR-laser platemaking)

IT 27029-76-1, m-Cresol-p-cresol-formaldehyde copolymer 35464-74-5, m-Cresol-p-cresol-formaldehyde-phenol copolymer 146115-88-0 451462-69-4
RL: TEM (Technical or engineered material use); USES (Uses)
(in upper imaging layer showing disperse system; **lithog. printing plate** precursor for direct IR-laser platemaking)

L64 ANSWER 3 OF 21 HCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2005:1355520 HCAPLUS
DOCUMENT NUMBER: 144:97717
TITLE: Modified polymers and their use in the production of **lithographic printing plate** precursors
INVENTOR(S): Savariar-Hauck, Celin; Monk, Alan S. V.; Ullrich, Rene
PATENT ASSIGNEE(S): Kodak Polychrome Graphics GmbH, Germany
SOURCE: PCT Int. Appl., 44 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2005123412	A1	20051229	WO 2005-EP6426	2005 0615
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
DE 102004029501	A1	20060112	DE 2004-102004029501	2004 0618

PRIORITY APPLN. INFO.: DE 2004-102004029501A 2004 0618

AB The invention relates to radiation-sensitive neg. metalworking element comprising (a) a substrate with a hydrophilic surface and (b) a layer on the hydrophilic surface of the substrate, wherein said layer comprises a modified polymer obtainable by reacting (i) a polymer with -COOH, -SO3H, -PO3H2 and/or -PO4H2 in the side chains, wherein the polymer is **soluble** in aqueous **alk** . solns. and the solubility is not changed by IR radiation, and (ii) a salt with an inorg. or organic cation, wherein the modified polymer is **soluble** in aqueous **alkaline** solns. and the solubility is not changed by IR radiation, said layer being **soluble** in **aqueous alkaline** developer, but is rendered **insol.** in **aqueous** alkaline developer by IR radiation. The polymer provides printing plate precursor of improved solvent resistance without compromising radiation sensitivity.

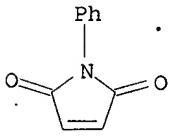
IT **321963-43-3P**, Methacrylic acid-N-phenylmaleimide-methacrylamide copolymer **847254-96-0DP**, N-Methoxymethylmethacrylamide-methacrylamide-N-phenylmaleimide-methacrylic acid copolymer, reaction product with IR-dye
RL: SPN (Synthetic preparation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(modified polymers and their use in production of **lithog. printing plate** precursors)

RN 321963-43-3 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, polymer with 2-methyl-2-propenamide and 1-phenyl-1H-pyrrole-2,5-dione (9CI) (CA INDEX NAME)

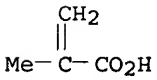
CM 1

CRN 941-69-5
CMF C10 H7 N O2



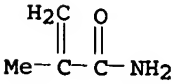
CM 2

CRN 79-41-4
CMF C4 H6 O2



CM 3

CRN 79-39-0
CMF C4 H7 N O



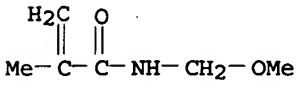
RN 847254-96-0 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, polymer with N-(methoxymethyl)-2-

methyl-2-propenamide, 2-methyl-2-propenamide and
1-phenyl-1H-pyrrole-2,5-dione (9CI) (CA INDEX NAME)

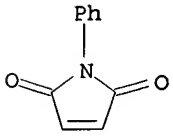
CM 1

CRN 3644-12-0
CMF C6 H11 N O2



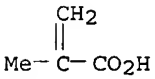
CM 2

CRN 941-69-5
CMF C10 H7 N O2



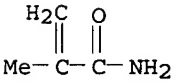
CM 3

CRN 79-41-4
CMF C4 H6 O2



CM 4

CRN 79-39-0
CMF C4 H7 N O



IC ICM B41M005-36
ICS B41C001-10
CC 74-6 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
Section cross-reference(s): 35
ST polymer **lithog printing plate** precursor solvent resistance
IT Photoimaging materials
(modified polymers and their use in production of **lithog. printing plate** precursors)
IT **Lithographic plates**
(precursors, photosensitive; modified polymers and their use in production of **lithog. printing plate** precursors)

IT 64-19-7DP, Acetic acid, reaction product with polymer 75-07-0DP, Acetaldehyde, reaction product with polyvinyl alc. 123-72-8DP, Butyraldehyde, reaction product with polyvinyl alc. 619-66-9DP, 4-Formylbenzoic acid, reaction product with polyvinyl alc. 2390-60-5DP, Victoria Blue BO, reaction product with polymer 9002-89-5DP, Mowiol 10-98, acetalated, reaction product with IR-dye 52229-50-2DP, Gantrez AN 119, acetalated, reaction product with IR-dye 134127-48-3DP, Trump Dye, reaction mixture with polymer with carboxylic group **321963-43-3P**, Methacrylic acid-N-phenylmaleimide-methacrylamide copolymer **847254-96-0DP**, N-Methoxymethylmethacrylamide-methacrylamide-N-phenylmaleimide-methacrylic acid copolymer, reaction product with IR-dye
RL: SPN (Synthetic preparation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(modified polymers and their use in production of **lithog. printing plate** precursors)

REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L64 ANSWER 4 OF 21 HCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2005:519467 HCAPLUS
DOCUMENT NUMBER: 143:50728
TITLE: Package of laminated **lithographic printing** original **plate**
INVENTOR(S): Maemoto, Kazuo
PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 30 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2005153908	A2	20050616	JP 2003-391982	2003 1121

PRIORITY APPLN. INFO.: JP 2003-391982 2003 1121

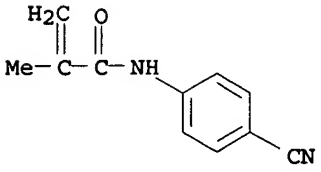
AB The plate comprises a support having (A) an under recording layer containing a resin **insol.** in **water** and **sol**. in **aqueous alkaline** solution, and (B) an upper recording layer, whose **soluble** to an aqueous **alkaline** soln increases by light exposure, containing the resin and a development inhibitor, in which A and/or B contains an IR absorbent. The package is a packed laminate of ≥200 the **lithog. plates** fixed on a carrying material. Deterioration on transportation is prevented and the plate gives clear images without defects and dots.

IT **811438-65-0P**, Acrylonitrile-p-cyanophenyl methacrylamide-methacrylic acid-methyl methacrylate copolymer
RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(recording layer containing; package of laminated **lithog. printing** original **plate**)

RN 811438-65-0 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, methyl ester, polymer with N-(4-cyanophenyl)-2-methyl-2-propenamide, 2-methyl-2-propenoic acid and 2-propenenitrile (9CI) (CA INDEX NAME)

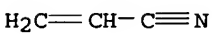
CM 1

CRN 90617-02-0
CMF C11 H10 N2 O



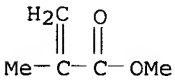
CM 2

CRN 107-13-1
CMF C3 H3 N



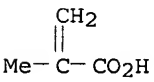
CM 3

CRN 80-62-6
CMF C5 H8 O2



CM 4

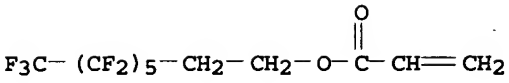
CRN 79-41-4
CMF C4 H6 O2



IT **593266-64-9**
RL: TEM (Technical or engineered material use); USES (Uses)
(recording layer containing; package of laminated **lithog.**
printing original **plate**)
RN 593266-64-9 HCAPLUS
CN 2-Propenoic acid, 3,3,4,4,5,5,6,6,7,7,8,8,8-tridecafluorooctyl ester, polymer with methyloxirane block polymer with oxirane mono-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 17527-29-6
CMF C11 H7 F13 O2

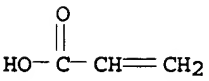


CM 2

CRN 112783-64-9
CMF (C3 H6 O . C2 H4 O)x . C3 H4 O2

CM 3

CRN 79-10-7
CMF C3 H4 O2

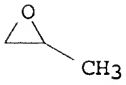


CM 4

CRN 106392-12-5
CMF (C3 H6 O . C2 H4 O)x
CCI PMS

CM 5

CRN 75-56-9
CMF C3 H6 O



CM 6

CRN 75-21-8
CMF C2 H4 O

IC ICM B65D071-02
ICS B65D071-04; B65D085-00; G03F007-00; G03F007-004; G03F007-11
CC 74-6 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
ST **lithog plate** laminate package; IR absorbent alkali soluble resin **lithog plate**
IT Phenolic resins, uses
RL: TEM (Technical or engineered material use); USES (Uses)
(novolak, recording layer containing; package of laminated **lithog. printing** original **plate**)
IT Containers
Lithographic plates
(package of laminated **lithog. printing** original **plate**)

IT 504387-13-7
RL: TEM (Technical or engineered material use); USES (Uses)
(development inhibitor; package of laminated **lithog. printing** original **plate**)
IT **811438-65-0P**, Acrylonitrile-p-cyanophenyl methacrylamide-methacrylic acid-methyl methacrylate copolymer
RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(recording layer containing; package of laminated **lithog. printing** original **plate**)
IT 27029-76-1, m-Cresol-p-cresol-formaldehyde copolymer 134127-48-3 146115-88-0 593259-12-2 **593266-64-9**
RL: TEM (Technical or engineered material use); USES (Uses)
(recording layer containing; package of laminated **lithog. printing** original **plate**)

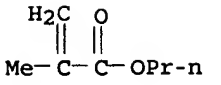
L64 ANSWER 5 OF 21 HCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2003:711065 HCAPLUS
DOCUMENT NUMBER: 139:237754
TITLE: Offset printing plate master showing excellent scratch-resistance, developability, and printability for laser direct printing platemaking
INVENTOR(S): Miyake, Hideo; Watanabe, Noriaki
PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 21 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2003255520	A2	20030910	JP 2002-55882	2002 0301
PRIORITY APPLN. INFO.:			JP 2002-55882	2002 0301

AB The title printing plate master comprises an image recording layer comprised of a **water-insol., alkaline-soluble** resin and IR-absorber on a support, wherein the image recording layer contains ≥1.0 % of water.
IT **58931-97-8P**, Methacrylic acid-propyl methacrylate copolymer
RL: DEV (Device component use); PNU (Preparation, unclassified); PREP (Preparation); USES (Uses)
(in offset printing plate master showing excellent scratch-resistance, developability, and printability for laser direct printing platemaking)
RN 58931-97-8 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, polymer with propyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

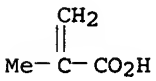
CM 1

CRN 2210-28-8
CMF C7 H12 O2



CM 2

CRN 79-41-4
CMF C4 H6 O2



IC ICM G03F007-00
ICS G03F007-004
CC 74-6 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
IT **Lithographic plates**
(offset; offset **printing plate** master showing excellent scratch-resistance, developability, and printability for laser direct printing platemaking)
IT **58931-97-8P**, Methacrylic acid-propyl methacrylate copolymer 141634-00-6P, Acrylonitrile-N-(4-aminosulfonylphenyl)methacrylamide-methyl methacrylate copolymer
RL: DEV (Device component use); PNU (Preparation, unclassified); PREP (Preparation); USES (Uses)
(in offset printing plate master showing excellent scratch-resistance, developability, and printability for laser direct printing platemaking)

L64 ANSWER 6 OF 21 HCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2001:847626 HCAPLUS
DOCUMENT NUMBER: 135:378768
TITLE: IR laser direct-writing negative-working **lithographic printing plates**
INVENTOR(S): Aoshima, Keitaro
PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 30 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2001324798	A2	20011122	JP 2000-144732	2000 0517
EP 1155820	A2	20011121	EP 2001-110103	2001 0502
EP 1155820	A3	20030924		
EP 1155820	B1	20060215		
R: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT, SE, TR				
US 2002011165	A1	20020131	US 2001-847411	2001 0503

US 6972167 B2 20051206
PRIORITY APPLN. INFO.: JP 2000-144732 A 2000 0517

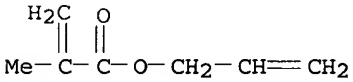
AB The plate comprises a support having (1) an underlayer containing a **water-insol.** but **aqueous alkaline-soluble** polymer and (2) an overlayer containing crosslinkable or polymerizable compound and which decreases its solubility to alkaline developing agent by forming covalent bonds induced by heat or light. The overlayer may contain IR absorbents free of ablation. Printings with excellent dot reproducibility are obtained by use of the plates.

IT **90216-38-9**, Allyl methacrylate-methacrylic acid copolymer
RL: DEV (Device component use); USES (Uses)
(IR laser direct-writing neg.-working **lithog. printing plates** giving images with high dot reproducibility)

RN 90216-38-9 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, polymer with 2-propenyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

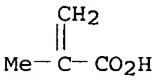
CM 1

CRN 96-05-9
CMF C7 H10 O2



CM 2

CRN 79-41-4
CMF C4 H6 O2



IC ICM G03F007-00
ICS B41N001-14; G03F007-004; G03F007-027; G03F007-11

CC 74-6 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
Section cross-reference(s): 38

ST IR laser direct writing **lithog plate**; neg working IR writing **lithog plate**

IT Optical materials
(IR absorbers; IR laser direct-writing neg.-working **lithog. printing plates** giving images with high dot reproducibility)

IT Crosslinking
Lithographic plates
Polymerization
(IR laser direct-writing neg.-working **lithog. printing plates** giving images with high dot reproducibility)

IT IR materials
(absorbers; IR laser direct-writing neg.-working **lithog. printing plates** giving images with high dot reproducibility)

IT 134127-48-3
RL: DEV (Device component use); MOA (Modifier or additive use); USES (Uses)
(IR absorbent; IR laser direct-writing neg.-working **lithog. printing plates** giving images with high dot reproducibility)
IT 29570-58-9, Dipentaerythritol hexaacrylate 40220-08-4
90216-38-9, Allyl methacrylate-methacrylic acid copolymer
131290-87-4, Methyl methacrylate-N-(p-toluenesulfonyl)methacrylamide copolymer 374667-55-7, Butyl acrylate-N-(p-aminosulfonylphenyl)methacrylamide copolymer
RL: DEV (Device component use); USES (Uses)
(IR laser direct-writing neg.-working **lithog. printing plates** giving images with high dot reproducibility)
IT 262612-33-9
RL: DEV (Device component use); MOA (Modifier or additive use); USES (Uses)
(radical initiator; IR laser direct-writing neg.-working **lithog. printing plates** giving images with high dot reproducibility)

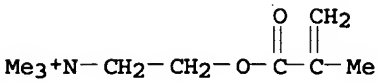
L64 ANSWER 7 OF 21 HCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2001:709943 HCAPLUS
DOCUMENT NUMBER: 135:280521
TITLE: Heat mode **lithographic** original **plate** with intermediate layer
INVENTOR(S): Shimada, Kazuto; Uno, Seiji; Kunita, Kazuto
PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 33 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2001264991	A2	20010928	JP 2000-73858	2000 0316
PRIORITY APPLN. INFO.:			JP 2000-73858	2000 0316

AB The material comprises an anodized aluminum support having thereon (A) an intermediate layer containing a polymer with an acidic group and an onium group and (B) a photosensitive layer containing an IR absorber, a polymerization initiator, a compound with a polymerizable unsatd. group, and a binder which is **insol.** to **water** and **soluble** to **alkaline** aqueous solution It shows improved adhesion between the support and the photosensitive layer, dirt prevention in non-image area, image reproduction, and printing durability.
IT **220338-27-2**
RL: DEV (Device component use); USES (Uses)
(heat-mode **lithog. plate** with intermediate layer containing polymer with acidic and onium groups)
RN 220338-27-2 HCAPLUS
CN Ethanaminium, N,N,N-trimethyl-2-[(2-methyl-1-oxo-2-propenyl)oxy]-, chloride, polymer with methyl 2-methyl-2-propenoate and 2-methyl-2-propenoic acid (9CI) (CA INDEX NAME)

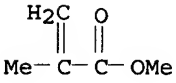
CM 1

CRN 5039-78-1
CMF C9 H18 N O2 . Cl



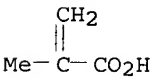
CM 2

CRN 80-62-6
CMF C5 H8 O2



CM 3

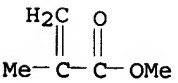
CRN 79-41-4
CMF C4 H6 O2



IT **25086-15-1**, Methacrylic acid-methyl methacrylate copolymer
26351-99-5, Acrylic acid-butyl acrylate-2-hydroxyethyl methacrylate-methyl methacrylate copolymer **90216-38-9**, Allyl methacrylate-methacrylic acid copolymer
RL: DEV (Device component use); USES (Uses)
(photosensitive layer, binder; heat-mode **lithog. plate** with intermediate layer containing polymer with acidic and onium groups)
RN 25086-15-1 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, polymer with methyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

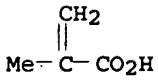
CM 1

CRN 80-62-6
CMF C5 H8 O2



CM 2

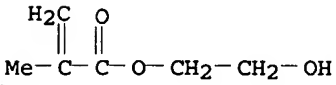
CRN 79-41-4
CMF C4 H6 O2



RN 26351-99-5 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, 2-hydroxyethyl ester, polymer with butyl 2-propenoate, methyl 2-methyl-2-propenoate and 2-propenoic acid (9CI) (CA INDEX NAME)

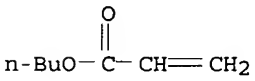
CM 1

CRN 868-77-9
CMF C6 H10 O3



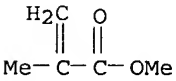
CM 2

CRN 141-32-2
CMF C7 H12 O2



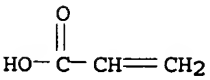
CM 3

CRN 80-62-6
CMF C5 H8 O2



CM 4

CRN 79-10-7
CMF C3 H4 O2

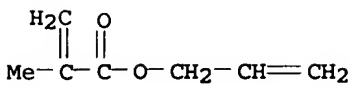


RN 90216-38-9 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, polymer with 2-propenyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

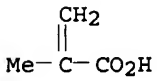
CRN 96-05-9

CMF C7 H10 O2



CM 2

CRN 79-41-4
CMF C4 H6 O2



IC ICM G03F007-11
ICS G03F007-00; G03F007-004; G03F007-033
CC 74-6 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
Section cross-reference(s): 38
ST **lithog plate** heat mode; intermediate layer polymer acidic onium group; IR absorbent photosensitive layer **lithog plate**
IT Carbon black, uses
RL: DEV (Device component use); USES (Uses)
(IR absorbent; heat-mode **lithog. plate** with intermediate layer containing polymer with acidic and onium groups)
IT **Lithographic plates**
(heat-mode **lithog. plate** with intermediate layer containing polymer with acidic and onium groups)
IT 134127-48-3 173474-43-6
RL: DEV (Device component use); USES (Uses)
(IR absorbent; heat-mode **lithog. plate** with intermediate layer containing polymer with acidic and onium groups)
IT 94-36-0, Benzoyl peroxide, uses 1707-68-2 220122-68-9 220476-39-1
RL: CAT (Catalyst use); USES (Uses)
(heat-mode **lithog. plate** with intermediate layer containing polymer with acidic and onium groups)
IT 215926-06-0 216861-99-3 220227-02-1 **220338-27-2** 224179-27-5 252721-97-4 252721-98-5 263711-33-7 263718-09-8 362623-79-8 362624-29-1
RL: DEV (Device component use); USES (Uses)
(heat-mode **lithog. plate** with intermediate layer containing polymer with acidic and onium groups)
IT **25086-15-1**, Methacrylic acid-methyl methacrylate copolymer **26351-99-5**, Acrylic acid-butyl acrylate-2-hydroxyethyl methacrylate-methyl methacrylate copolymer **90216-38-9**, Allyl methacrylate-methacrylic acid copolymer 362623-80-1
RL: DEV (Device component use); USES (Uses)
(photosensitive layer, binder; heat-mode **lithog. plate** with intermediate layer containing polymer with acidic and onium groups)
IT 4986-89-4, Pentaerythritol tetraacrylate 29570-58-9, Dipentaerythritol hexaacrylate
RL: DEV (Device component use); USES (Uses)
(photosensitive layer; heat-mode **lithog. plate** with intermediate layer containing polymer with acidic and onium groups)

L64 ANSWER 8 OF 21 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2001:709844 HCAPLUS
DOCUMENT NUMBER: 135:249505
TITLE: Positive-working presensitized **plate** useful for preparing a **lithographic printing plate**
INVENTOR(S): Fujita, Kazuo; Tan, Shiro; Nagashima, Akira
PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan
SOURCE: Eur. Pat. Appl., 34 pp.
CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

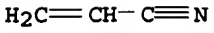
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 1136886	A1	20010926	EP 2001-106429	2001 0322
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
JP 2001264979	A2	20010928	JP 2000-79611	2000 0322
CN 1314617	A	20010926	CN 2001-103858	2001 0314
US 2001041299	A1	20011115	US 2001-811425	2001 0320
US 6517987	B2	20030211		
PRIORITY APPLN. INFO.:			JP 2000-79611 A	2000 0322

AB The present invention relates to a pos.-working presensitized **plate** useful for preparing a **lithog. printing plate** comprising a pos.-working photosensitive composition comprising at least one ester of 1,2-naphthoquinone-2-diazide-5-sulfonic acid, at least one ester of 1,2-naphthoquinone-2-diazide-4-sulfonic acid, and at least one polymer which is **insol.** in **water** and **soluble** in an aqueous **alkaline** solution and which comprises at least one group or bond selected from sulfonamide group, urea bond or urethane bond. A **lithog. printing plate** prepared from the presensitized plate of the present invention shows improvement of chemical-resistance and printing durability, and good sensitivity, coupling property, adaptability to ball-point pen, shelf stability, and stability of sensitivity with time after exposure.

IT **29763-27-7P**
RL: SPN (Synthetic preparation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(pos.-working presensitized **plate** useful for preparing **lithog. printing plate**)
RN 29763-27-7 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, polymer with methyl 2-methyl-2-propenoate and 2-propenenitrile (9CI) (CA INDEX NAME)

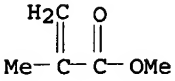
CM 1

CRN 107-13-1
CMF C3 H3 N



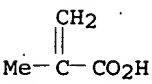
CM 2

CRN 80-62-6
CMF C5 H8 O2



CM 3

CRN 79-41-4
CMF C4 H6 O2



IC ICM G03F007-022
ICS G03F007-023
CC 74-6 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
ST **lithog printing plate** presensitized pos working resin
IT **Lithographic plates**
(presensitized, pos.-working; pos.-working presensitized plate useful for preparing **lithog. printing plate**)
IT 29763-27-7P 141634-00-6P, Acrylonitrile-N-(p-aminosulfonylphenyl)methacrylamide-methylmethacrylate copolymer 184348-65-0P 263716-62-7P 326820-92-2P, Acrylonitrile-N-(p-aminosulfonylphenyl)methacrylamide-2-hydroxyethyl methacrylate-methylmethacrylate copolymer 355113-67-6P 360787-05-9P 360787-06-0P 360787-07-1P
RL: SPN (Synthetic preparation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(pos.-working presensitized **plate** useful for preparing **lithog. printing plate**)
IT 123-30-8D, 4-Aminophenol, reaction products with xylenediisocyanate, ester with naphthoquinonediazide sulfonic acid 3634-83-1D, reaction products with aminophenol, ester with naphthoquinonediazide sulfonic acid 20546-03-6D, 1,2-Naphthoquinone-2-diazide-5-sulfonic acid, ester with reaction products of aminophenol and xylenediisocyanate 20680-48-2D, 1,2-Naphthoquinone-2-diazide-4-sulfonic acid, ester with reaction products of aminophenol and xylenediisocyanate 40377-69-3, 1,2-Naphthoquinone-2-diazide-5-sulfonic acid 2,3,4-trihydroxybenzophenone ester 58640-48-5, Acetone-pyrogallol copolymer 1,2-naphthoquinone-2-diazide-4-sulfonate 68584-99-6, Acetone-pyrogallol copolymer 1,2-naphthoquinone-2-diazide-5-sulfonate 84938-98-7 95965-97-2 121870-66-4 125857-81-0 133757-73-0D, Burnock DN-980S, reaction products with aminophenol, ester with naphthoquininediazide sulfonic acid 360791-61-3
RL: TEM (Technical or engineered material use); USES (Uses)
(pos.-working presensitized **plate** useful for preparing **lithog. printing plate**)
REFERENCE COUNT: 6 THERE ARE 6 CITED REFERENCES AVAILABLE

FOR THIS RECORD. ALL CITATIONS AVAILABLE
IN THE RE FORMAT

L64 ANSWER 9 OF 21 HCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2001:654950 HCAPLUS
DOCUMENT NUMBER: 135:218760
TITLE: Materials for heat-mode laser platemaking offering long-life **lithographic** master **plates**
INVENTOR(S): Fujimaki, Kazuhiro; Sorori, Tadahiro
PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 24 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2001242612	A2	20010907	JP 2000-55564	2000 0301
US 2002086238	A1	20020704	US 2001-795195	2001 0301
US 6844137	B2	20050118		
AT 307025	E	20051115	AT 2001-104496	2001 0301
PRIORITY APPLN. INFO.:			JP 2000-55564 A	2000 0301
			JP 2000-133198 A	2000 0502

AB The materials contain (A) **water-insol.** macromols. bearing XNHY or ZNHR (X, Y = bivalent organic groups essentially containing CO and/or SO2; Z = CO, SO2; R = H, monovalent organic groups) in their sidechains and being **soluble** in aqueous **alkaline** solns., (B) radical monomers, (C) light-heat converting agents, and (D) radical generators. Lithog. masters offered by platemaking of the materials show excellent printing durability.

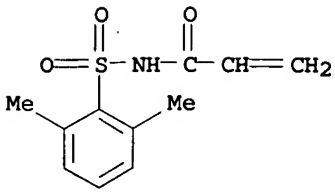
IT **358349-39-0P 358349-47-0P**
RL: DEV (Device component use); PNU (Preparation, unclassified); PREP (Preparation); USES (Uses)
(materials for heat-mode laser platemaking offering long-life lithog. masters)

RN 358349-39-0 HCAPLUS

CN 2-Propenoic acid, polymer with N-[(2,6-dimethylphenyl)sulfonyl]-2-propenamide, 2-[[3-[(1-oxo-2-propenyl)oxy]-2,2-bis[[(1-oxo-2-propenyl)oxy]methyl]propoxy]methyl]-2-[[(1-oxo-2-propenyl)oxy]methyl]-1,3-propanediyl di-2-propenoate and 2-(2-propenyloxy)ethyl 2-propenoate (9CI) (CA INDEX NAME)

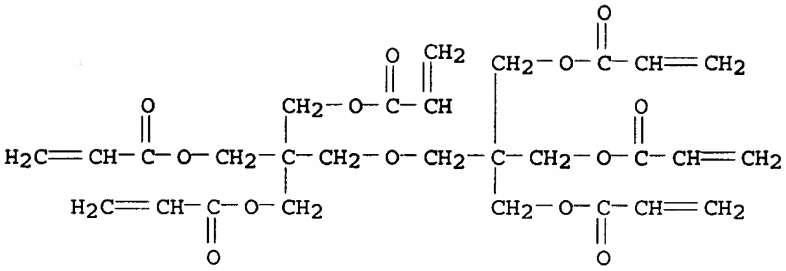
CM 1

CRN 358349-38-9
CMF C11 H13 N O3 S



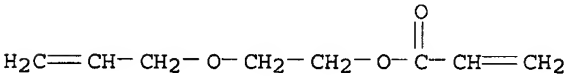
CM 2

CRN 29570-58-9
CMF C28 H34 O13



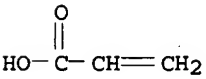
CM 3

CRN 7784-80-7
CMF C8 H12 O3



CM 4

CRN 79-10-7
CMF C3 H4 O2

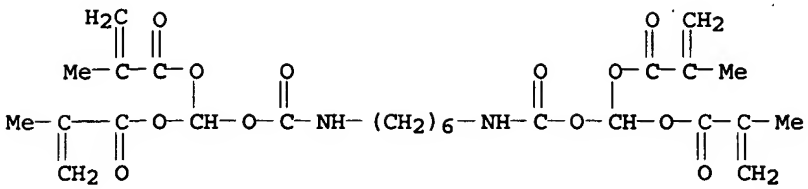


RN 358349-47-0 HCAPLUS
CN 11,13-Dioxa-2,9-diazahexadec-15-enoic acid, 15-methyl-12-[(2-methyl-1-oxo-2-propenyl)oxy]-10,14-dioxo-, bis[(2-methyl-1-oxo-2-propenyl)oxy]methyl ester, polymer with 2-methyl-N-(phenylsulfonyl)-2-propenamide, 2-methyl-2-propenoic acid and 2-(2-propenyloxy)ethyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

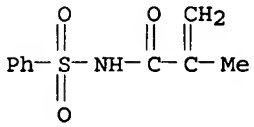
CRN 278777-56-3

CMF C26 H36 N2 O12



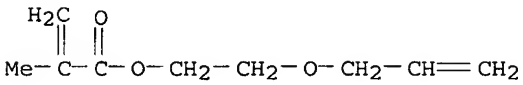
CM 2

CRN 33920-37-5
CMF C10 H11 N O3 S



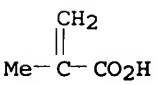
CM 3

CRN 16839-48-8
CMF C9 H14 O3



CM 4

CRN 79-41-4
CMF C4 H6 O2



IC ICM G03F007-00
ICS B41N001-14; C08F002-44; C08F002-50; C08F291-00; G03F007-004; G03F007-027; G03F007-032

CC 74-6 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
Section cross-reference(s): 38

ST acidic hydrogen bearing binder lithog master; neg photoimaging lithog master laser platemaking; **printing** durability improved **lithog** master **plate**; carbonyl sulfonyl bearing binder lithog master

IT **Lithographic plates**
(materials for heat-mode laser platemaking offering long-life lithog. masters)

IT 358349-32-3P 358349-34-5P 358349-35-6P 358349-37-8P
358349-39-0P 358349-40-3P 358349-41-4P 358349-42-5P
358349-43-6P 358349-45-8P 358349-46-9P **358349-47-0P**

358349-48-1P 358349-49-2P 358349-50-5P
RL: DEV (Device component use); PNU (Preparation, unclassified); PREP (Preparation); USES (Uses)
(materials for heat-mode laser platemaking offering long-life lithog. masters)

L64 ANSWER 10 OF 21 HCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2001:615695 HCAPLUS
DOCUMENT NUMBER: 135:187747
TITLE: Manufacture of chemically-resistant planographic plates employing nonreducing-sugar-containing developers
INVENTOR(S): Fujita, Kazuo; Tan, Shiro
PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 18 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2001228627	A2	20010824	JP 2000-37466	2000 0216

PRIORITY APPLN. INFO.: JP 2000-37466 2000 0216

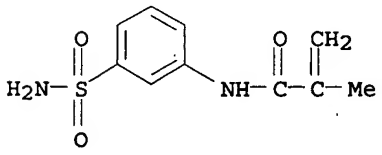
AB In the process, presensitized planog. plates possessing pos. photoimageable layers containing sulfonamide-bearing **water-insol.** macromols. are processed with developers with pH 9.0-13.5 containing nonreducing sugars and bases. The macromols. are **soluble** in aqueous **alkaline** solns. The plates show minimized residual color and inhibit coupling phenomena.

IT 125370-69-6P
RL: PEP (Physical, engineering or chemical process); PNU (Preparation, unclassified); TEM (Technical or engineered material use); PREP (Preparation); PROC (Process); USES (Uses)
(photoimageable layers; manufacture of chemical-resistant planog. plates employing nonreducing-sugar-containing developers)

RN 125370-69-6 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, polymer with N-[3-(aminosulfonyl)phenyl]-2-methyl-2-propenamide and 2-propenenitrile (9CI) (CA INDEX NAME)

CM 1

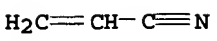
CRN 125026-41-7
CMF C10 H12 N2 O3 S



CM 2

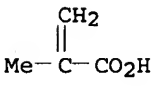
CRN 107-13-1

CMF C3 H3 N



CM 3

CRN 79-41-4
CMF C4 H6 O2



IC ICM G03F007-32
ICS G03F007-00; G03F007-023
CC 74-6 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
Section cross-reference(s): 38
ST planog plate pattern developer nonreducing sugar; pH controlled developer **lithog printing plate**; sulfonamide bearing presensitized planog plate development; residual color minimized planog plate manuf
IT **Lithographic plates**
(planog.; manufacture of chemical-resistant planog. plates employing nonreducing-sugar-containing developers)
IT 124996-96-9P **125370-69-6P** 141634-00-6P 326820-92-2P, Acrylonitrile-N-(p-aminosulfonylphenyl)methacrylamide-2-hydroxyethyl methacrylate-methyl methacrylate copolymer 355113-72-3P 355113-73-4P
RL: PEP (Physical, engineering or chemical process); PNU (Preparation, unclassified); TEM (Technical or engineered material use); PREP (Preparation); PROC (Process); USES (Uses)
(photoimageable layers; manufacture of chemical-resistant planog. plates employing nonreducing-sugar-containing developers)

L64 ANSWER 11 OF 21 HCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2001:133717 HCAPLUS
DOCUMENT NUMBER: 134:185987
TITLE: Photosensitive **lithographic printing plate** comprising vinyl copolymer **soluble** in **alkaline** aqueous solution
INVENTOR(S): Fujita, Kazuo; Tan, Shiro
PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan
SOURCE: Eur. Pat. Appl., 26 pp.
CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 1077392	A1	20010221	EP 2000-116205	2000 0803
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
JP 2001051407	A2	20010223	JP 1999-229889	1999

					0816
JP 2001051408	A2	20010223	JP 1999-229890		
					1999
					0816
PRIORITY APPLN. INFO.:			JP 1999-229889	A	
					1999
					0816
			JP 1999-229890	A	
					1999
					0816

AB Disclosed is a photosensitive **lithog. printing plate** having a photosensitive layer that comprises an o-naphthoquinone diazide compound and vinyl polymer **insol.** in **water** but **soluble** in an **alkaline** aqueous solution, the vinyl polymer is a copolymer that comprises (a) units of a compound containing at least one phenolic hydroxyl group or at least one sulfonamido group and at least one polymerizable unsatd. bond and (b) units of a compound containing at least one alc. hydroxyl group and at least one polymerizable unsatd. bond. An object of the present invention is to provide the photosensitive **lithog. printing plate** that can be developed with the aqueous alkaline developer, has excellent abrasion resistance and ensures no scum during printing and great press life.

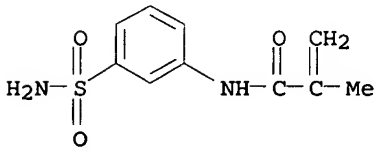
IT **326820-95-5P**
RL: PNU (Preparation, unclassified); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(vinyl polymer **insol.** in **water** but **soluble** in **alkaline** aqueous solution for photosensitive **lithog. printing plate**)

RN 326820-95-5 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, polymer with N-[3-(aminosulfonyl)phenyl]-2-methyl-2-propenamide, 2-hydroxyethyl 2-methyl-2-propenoate and 2-propenenitrile (9CI) (CA INDEX NAME)

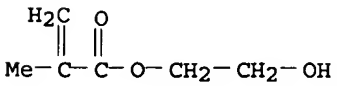
CM 1

CRN 125026-41-7
CMF C10 H12 N2 O3 S



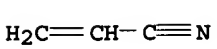
CM 2

CRN 868-77-9
CMF C6 H10 O3



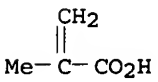
CM 3

CRN 107-13-1
CMF C3 H3 N



CM 4

CRN 79-41-4
CMF C4 H6 O2



IC ICM G03F007-023
CC 74-6 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
Section cross-reference(s): 38
ST **lithog printing plate** photosensitive vinyl copolymer aq alkali developer; UV ink photosensitive **lithog printing plate** vinyl copolymer
IT **Lithographic plates**
(photosensitive **lithog. printing plate** comprising vinyl polymer and o-naphthoquinone diazide compound)
IT 68510-93-0, 2,3,4-Trihydroxybenzophenone naphthoquinone-1,2-diazide-5-sulfonate
RL: TEM (Technical or engineered material use); USES (Uses)
(photosensitive **lithog. printing plate** comprising vinyl polymer and o-naphthoquinone diazide compound)
IT 623-05-2, 4-Hydroxybenzylalcohol 30674-80-7
RL: RCT (Reactant); RACT (Reactant or reagent)
(preparation of vinyl polymer **insol.** in **water** but **soluble** in **alkaline** aqueous solution for photosensitive **lithog. printing plate**)
IT 293315-01-2P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation of vinyl polymer **insol.** in **water** but **soluble** in **alkaline** aqueous solution for photosensitive **lithog. printing plate**)
IT 326820-83-1P 326820-85-3P 326820-87-5P 326820-89-7P
326820-91-1P 326820-93-3P 326820-94-4P **326820-95-5P**
326820-96-6P 326820-97-7P 326820-98-8P
RL: PNU (Preparation, unclassified); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(vinyl polymer **insol.** in **water** but **soluble** in **alkaline** aqueous solution for photosensitive **lithog. printing plate**)
IT 326820-82-0P 326820-92-2P, Acrylonitrile-N-(p-aminosulfonylphenyl)methacrylamide-2-hydroxyethyl methacrylate-methyl methacrylate copolymer
RL: PRP (Properties); SPN (Synthetic preparation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(vinyl polymer **insol.** in **water** but **soluble** in **alkaline** aqueous solution for photosensitive

lithog. printing plate)
REFERENCE COUNT: 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L64 ANSWER 12 OF 21 HCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 1997:350555 HCAPLUS
DOCUMENT NUMBER: 126:323323
TITLE: Positive presensitized **lithographic printing plate** and process for producing the same
INVENTOR(S): Kawauchi, Ikuo; Mizutani, Kazutaka; Fukino, Kiyotaka; Kitada, Kazuyuki; Oda, Kazutaka
PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan
SOURCE: Eur. Pat. Appl., 22 pp.
CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 766140	A1	19970402	EP 1996-115583	1996 0927
EP 766140 R: DE, GB	B1	20010411		
JP 09090610	A2	19970404	JP 1995-273650	1995 0927
JP 3471990	B2	20031202		
JP 2004004884	A2	20040108	JP 2003-164143	2003 0609
PRIORITY APPLN. INFO.:			JP 1995-273650 A	1995 0927

AB A pos. presensitized **lithog. printing plate** comprising a support and a light-sensitive layer formed thereon which contains (a) an acrylic or urethane-based high-mol.-weight compound which is **insol.** in water but **soluble** in an **alkaline** aqueous solution and (b) an alkali-soluble novolak resin, either the high-mol.- weight compound or the resin providing dispersed phases having a maximum major axis of 0.1 to 0.8 μm and an average major axis of 0.05 to 0.6 μm and a process for producing the same are disclosed. The printing plate has long press life and great latitude in development.

IT **28136-81-4**, 2-Hydroxyethyl methacrylate;methacrylic acid;methyl methacrylate copolymer
RL: TEM (Technical or engineered material use); USES (Uses)
(pos. presensitized **lithog. printing plates** containing)

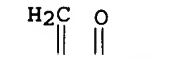
RN 28136-81-4 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, polymer with 2-hydroxyethyl 2-methyl-2-propenoate and methyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 868-77-9
CMF C6 H10 O3

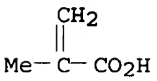
CM 2

CRN 80-62-6
CMF C5 H8 O2



CM 3

CRN 79-41-4
CMF C4 H6 O2



IC ICM G03F007-023
CC 74-6 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
ST pos presensitized **lithog plate** novolak resin; urethane compd pos presensitized **lithog plate**; acrylic compd pos presensitized **lithog plate**
IT **Lithographic plates**
(pos. presensitized; containing acrylic or urethane compds. and)
IT 9003-35-4, Formaldehyde-phenol copolymer 27029-76-1, m-Cresol-p-cresol-formaldehyde copolymer **28136-81-4**, 2-Hydroxyethyl methacrylate;methacrylic acid;methyl methacrylate copolymer 68510-93-0 115111-30-3, Acrylonitrile-N-(4-hydroxyphenyl)methacrylamide-methyl methacrylate copolymer 124996-93-6, N-[4-(Aminosulfonyl)phenyl]-2-methyl-2-propenamide; ethyl 2-methyl-2-propenoate;2-propenenitrile copolymer 130396-33-7 153273-61-1 189316-89-0, Benzyl methacrylate;methyl methacrylate;N-[4-(methylphenyl)sulfonyl]-2-methyl-2-propenamide;2-propenenitrile copolymer 189316-90-3
RL: TEM (Technical or engineered material use); USES (Uses)
(pos. presensitized **lithog. printing plates** containing)

L64 ANSWER 13 OF 21 HCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 1997:69495 HCAPLUS
DOCUMENT NUMBER: 126:96954
TITLE: Negative-working image recording material for offset printing
INVENTOR(S): Kobayashi, Fumikazu; Mizutani, Kazuyoshi; Aoshima, Keitaro
PATENT ASSIGNEE(S): Fuji Photo Film Co Ltd, Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 24 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 08276558	A2	19961022	JP 1995-330618	19951219
JP 3515846	B2	20040405		
US 6132935	A	20001017	US 1996-691371	19960802
EP 780239	A2	19970625	EP 1996-112679	19960806
EP 780239	A3	19980819		
EP 780239	B1	20011107		
R: DE, GB				
PRIORITY APPLN. INFO.:			JP 1995-18120 A	19950206
			JP 1995-330618 A	19951219

AB The title neg.-working image recording material contains a light-absorbing substance which will generate heat on exposure to light, a resin which is **insol.** in **water** but **soluble** in an **alkaline** aqueous solution, and a phenolic derivative which has 4-8 benzene nuclei, ≥1 phenolic OH's, and ≥2 -CH2OR1 (R1 = alkyl, acyl) groups in its mol. This image recording material is suitable for direct platemaking using near IR and IR.

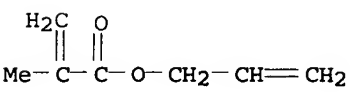
IT **90216-38-9**, Allyl methacrylate-methacrylic acid copolymer
RL: TEM (Technical or engineered material use); USES (Uses)
(neg.-working image recording material from)

RN 90216-38-9 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, polymer with 2-propenyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

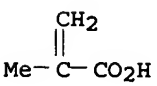
CM 1

CRN 96-05-9
CMF C7 H10 O2



CM 2

CRN 79-41-4
CMF C4 H6 O2



IC ICM B41C001-05
ICS G03F007-00; G03F007-038; G03F007-20

CC 74-6 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)

IT **Lithographic plates**
(offset; neg.-working image recording material for)
IT 9003-35-4, Formaldehyde phenol copolymer 53655-17-7 55281-19-1
90216-38-9, Allyl methacrylate-methacrylic acid copolymer
174568-71-9 174568-79-7 185502-21-0 185502-22-1
185502-23-2
RL: TEM (Technical or engineered material use); USES (Uses)
(neg.-working image recording material from)

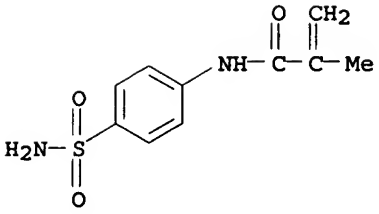
L64 ANSWER 14 OF 21 HCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 1996:485266 HCAPLUS
DOCUMENT NUMBER: 125:127850
TITLE: Positive-working photosensitive composition and manufacture of **lithographic plate**
INVENTOR(S): Kawachi, Ikuo
PATENT ASSIGNEE(S): Fuji Photo Film Co Ltd, Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 17 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 08123029	A2	19960517	JP 1994-263862	1994 1027
JP 3335015	B2	20021015		
PRIORITY APPLN. INFO.:			JP 1994-263862	1994 1027

AB The composition comprises (a) an polymer with a sulfonamide group and **insol.** in **water** and **soluble** in an **alkaline** aqueous solution, (b) an alkali-**soluble** novolak resin, (c) a pos.-working photosensitive compound, and (d) a cyclic lactone. A pos.-working presensitized **lithog. plate** is prepared by coating the composition on a substrate and drying. The plate shows good development latitude, abrasion resistance, printing durability without burning treatment, and chemical resistance.
IT **124996-94-7**, N-(p-Aminosulfonylphenyl)methacrylamide-ethyl methacrylate-methacrylic acid copolymer
RL: DEV (Device component use); USES (Uses)
(pos.-working presensitized **lithog. plate** containing cyclic lactone and polymer with sulfonamide group)
RN 124996-94-7 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, polymer with N-[4-(aminosulfonyl)phenyl]-2-methyl-2-propenamide and ethyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

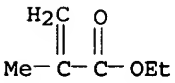
CM 1

CRN 56992-87-1
CMF C10 H12 N2 O3 S



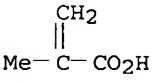
CM 2

CRN 97-63-2
CMF C6 H10 O2



CM 3

CRN 79-41-4
CMF C4 H6 O2



IC ICM G03F007-039
ICS G03F007-00; G03F007-022; G03F007-023; G03F007-033; G03F007-035
CC 74-6 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
ST **lithog plate** presensitized cyclic lactone; photosensitive compn sulfonamide group polymer
IT **Lithographic plates**
(pos.-working photosensitive compns. containing cyclic lactones for preparation of)
IT Urethane polymers
RL: DEV (Device component use); USES (Uses)
(pos.-working photosensitive compns. for **lithog. plate** preparation containing cyclic lactones and)
IT **124996-94-7**, N-(p-Aminosulfonylphenyl)methacrylamide-ethyl methacrylate-methacrylic acid copolymer 124996-96-9 179695-30-8
RL: DEV (Device component use); USES (Uses)
(pos.-working presensitized **lithog. plate** containing cyclic lactone and polymer with sulfonamide group)
IT 96-48-0, γ-Butyrolactone
RL: DEV (Device component use); MOA (Modifier or additive use); USES (Uses)
(pos.-working presensitized **lithog. plate** containing cyclic lactone and polymer with sulfonamide group)
IT 62814-37-3P, N-(p-Aminosulfonylphenyl)methacrylamide-methyl methacrylate copolymer 124996-93-6P, Acrylonitrile-N-(p-Aminosulfonylphenyl)methacrylamide-ethyl methacrylate copolymer 124996-98-1P 179695-31-9P
RL: DEV (Device component use); PNU (Preparation, unclassified); PREP (Preparation); USES (Uses)

(pos.-working presensitized **lithog. plate** containing cyclic lactone and polymer with sulfonamide group)

L64 ANSWER 15 OF 21 HCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 1996:248128 HCAPLUS
DOCUMENT NUMBER: 124:302640
TITLE: Photosensitive compositions using synthetic resin surfactant
INVENTOR(S): Nakamura, Chiaki; Yamamoto, Koji; Hayakawa, Eiji
PATENT ASSIGNEE(S): Dainippon Ink & Chemicals, Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 19 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 08015858	A2	19960119	JP 1994-149464	19940630
JP 3378359	B2	20030217		

PRIORITY APPLN. INFO.: JP 1994-149464 19940630

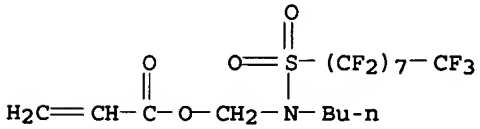
AB The title compns. contain, as a F-type surfactant, a synthetic resin having fluoroaliph. groups, polyoxyalkylene and/or anionic groups, and acidic H-containing substituents. The photosensitive composition for printing plate comprises the F-type surfactant, a photosensitive compound, and a synthetic resin which is **insol.** in **water** and **soluble** or swelling in **alkaline** solution The compns., used in production of presensitized **lithog. plates**, show good developability with exhausted developer. Thus, a photosensitive composition comprised a polyurethane prepared from perfluorooctanesulfonic acid diethanol amide, polyethylene glycol, 2,4-tolylene diisocyanate, and 2,2-bis(hydroxymethyl)propionic acid, 1,2-naphthoquinone-2-diazido-5-sulfonate of pyrogallol-acetone resin, and a cresol-HCHO novolak resin.

IT **176205-83-7 176205-84-8 176205-86-0**
RL: DEV (Device component use); MOA (Modifier or additive use); USES (Uses)
(photosensitive resin composition containing fluorine-type surfactant for presensitized **lithog. plate**)

RN 176205-83-7 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, polymer with [butyl[(heptadecafluorooctyl)sulfonyl]amino]methyl 2-propenoate and α-(1-oxo-2-propenyl)-ω-methoxypoly(oxy-1,2-ethanediyl) (9CI) (CA INDEX NAME)

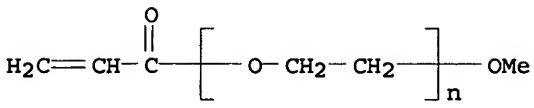
CM 1

CRN 176205-82-6
CMF C16 H14 F17 N O4 S



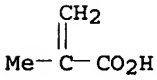
CM 2

CRN 32171-39-4
CMF (C2 H4 O)n C4 H6 O2
CCI PMS



CM 3

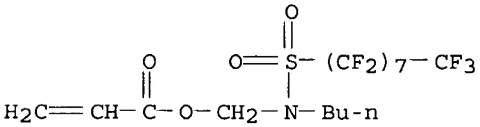
CRN 79-41-4
CMF C4 H6 O2



RN 176205-84-8 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, polymer with [butyl[(heptadecafluorooctyl)sulfonyl]amino]methyl 2-propenoate and α-(1-oxo-2-propenyl)-ω-methoxypoly[oxy(methyl-1,2-ethanediyl)] (9CI) (CA INDEX NAME)

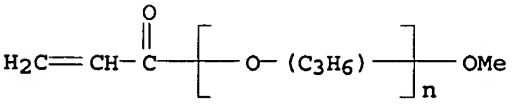
CM 1

CRN 176205-82-6
CMF C16 H14 F17 N O4 S



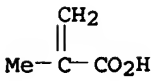
CM 2

CRN 83844-54-6
CMF (C3 H6 O)n C4 H6 O2
CCI IDS, PMS



CM 3

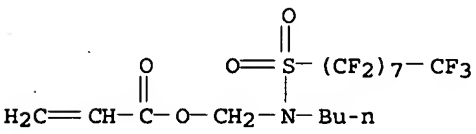
CRN 79-41-4
CMF C4 H6 O2



RN 176205-86-0 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, polymer with [butyl[(heptadecafluorooctyl)sulfonyl]amino]methyl 2-propenoate and 2-methyl-2-[(1-oxo-2-propenyl)amino]-1-propanesulfonic acid monosodium salt (9CI) (CA INDEX NAME)

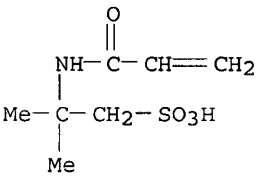
CM 1

CRN 176205-82-6
CMF C16 H14 F17 N O4 S



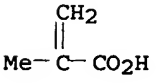
CM 2

CRN 5165-97-9
CMF C7 H13 N O4 S . Na



CM 3

CRN 79-41-4
CMF C4 H6 O2



IC ICM G03F007-004
ICS B01F017-52; C09D133-06; C09D201-02; G03F007-035
ICA C08F290-06; C08G018-65
CC 74-6 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
ST fluorine surfactant photosensitive compn; presensitized **lithog plate** photosensitive compn
IT **Lithographic plates**
(photosensitive resin composition containing fluorine-type surfactant

for presensitized **lithog. plate**)

IT Urethane polymers, uses
RL: DEV (Device component use); MOA (Modifier or additive use);
USES (Uses)
(fluorine-containing, photosensitive resin composition containing fluorine-type surfactant for presensitized **lithog. plate**)

IT Fluoropolymers
RL: DEV (Device component use); MOA (Modifier or additive use);
USES (Uses)
(polyurethane-, photosensitive resin composition containing fluorine-type surfactant for presensitized **lithog. plate**)

IT 176205-78-0 176205-79-1 176205-80-4 176205-81-5
176205-83-7 176205-84-8 176205-85-9
176205-86-0
RL: DEV (Device component use); MOA (Modifier or additive use);
USES (Uses)
(photosensitive resin composition containing fluorine-type surfactant for presensitized **lithog. plate**)

L64 ANSWER 16 OF 21 HCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 1990:226827 HCAPLUS
DOCUMENT NUMBER: 112:226827
TITLE: Photosensitive compositions for **lithographic plates**
INVENTOR(S): Koike, Akinobu; Akiyama, Keiji
PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan
SOURCE: Ger. Offen., 15 pp.
CODEN: GWXXBX
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 3918489	A1	19891214	DE 1989-3918489	1989 0606
JP 01307745	A2	19891212	JP 1988-139678	1988 0607
US 5047309	A	19910910	US 1989-362255	1989 0606
PRIORITY APPLN. INFO.:			JP 1988-139678 A	1988 0607

AB The title material comprises: (1) a substrate with a hydrophilic surface; (2) an underlayer containing ≥1 compound having ≥1 functional group from a thiol, a thioether, or a disulfide; and (3) a photosensitive layer containing a diazonium compound and a binder from a high mol. weight polymer which is **insol.** in **H2O** but **soluble** in an aqueous **alkaline** solution The above material is used for producing **lithog. plates.** The developed plates do not show staining of the background in the printing process.

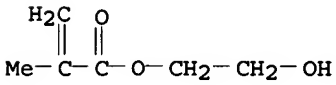
IT **59592-92-6 77833-95-5 126858-18-2**
127115-35-9
RL: USES (Uses)
(photosensitive composition containing, for **lithog. plate** production)

RN 59592-92-6 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, polymer with 2-hydroxyethyl 2-methyl-2-propenoate, methyl 2-methyl-2-propenoate and 2-propenenitrile (9CI) (CA INDEX NAME)

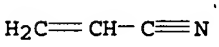
CM 1

CRN 868-77-9
CMF C6 H10 O3



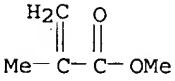
CM 2

CRN 107-13-1
CMF C3 H3 N



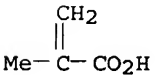
CM 3

CRN 80-62-6
CMF C5 H8 O2



CM 4

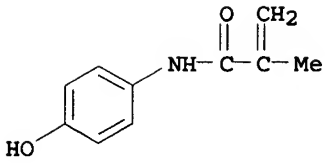
CRN 79-41-4
CMF C4 H6 O2



RN 77833-95-5 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, polymer with ethyl 2-propenoate, N-(4-hydroxyphenyl)-2-methyl-2-propenamide and 2-propenenitrile (9CI) (CA INDEX NAME)

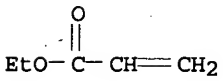
CM 1

CRN 19243-95-9
CMF C10 H11 N O2



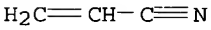
CM 2

CRN 140-88-5
CMF C5 H8 O2



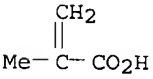
CM 3

CRN 107-13-1
CMF C3 H3 N



CM 4

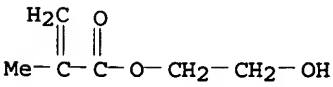
CRN 79-41-4
CMF C4 H6 O2



RN 126858-18-2 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, polymer with 2-hydroxyethyl 2-methyl-2-propenoate, methyl 2-methyl-2-propenoate, 2-propenenitrile and 1H-pyrrole-2,5-dione (9CI) (CA INDEX NAME)

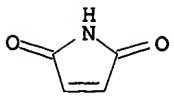
CM 1

CRN 868-77-9
CMF C6 H10 O3



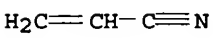
CM 2

CRN 541-59-3
CMF C4 H3 N O2



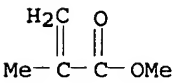
CM 3

CRN 107-13-1
CMF C3 H3 N



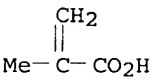
CM 4

CRN 80-62-6
CMF C5 H8 O2



CM 5

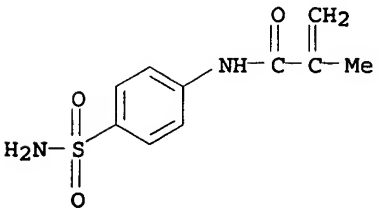
CRN 79-41-4
CMF C4 H6 O2



RN 127115-35-9 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, polymer with N-[4-(aminosulfonyl)phenyl]-2-methyl-2-propenamide, ethyl 2-propenoate and 2-propenenitrile (9CI) (CA INDEX NAME)

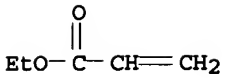
CM 1

CRN 56992-87-1
CMF C10 H12 N2 O3 S



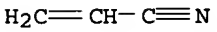
CM 2

CRN 140-88-5
CMF C5 H8 O2



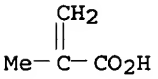
CM 3

CRN 107-13-1
CMF C3 H3 N



CM 4

CRN 79-41-4
CMF C4 H6 O2



IC ICM G03F007-08
ICS C25B003-02
CC 74-6 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
ST **lithog plate** photoimaging compn; binder photoimaging compn **lithog plate**
IT **Lithographic plates**
(photosensitive composition for fabrication of, multilayer)
IT 70-49-5 123-93-3 147-93-3 7134-41-0
RL: USES (Uses)
(photosensitive composition containing diazonium compound and, for **lithog. plate** production)
IT **59592-92-6 77833-95-5** 87263-96-5 117946-40-4 **126858-18-2 127115-35-9**
RL: USES (Uses)
(photosensitive composition containing, for **lithog. plate** production)

L64 ANSWER 17 OF 21 HCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 1990:226824 HCAPLUS
DOCUMENT NUMBER: 112:226824
TITLE: Photosensitive composition for **lithographic plate** production
INVENTOR(S): Aoshima, Kitaro; Akiyama, Keiji
PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan
SOURCE: Ger. Offen., 17 pp.
CODEN: GWXXBX
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 3913236	A1	19891102	DE 1989-3913236	

				1989 0421
JP 01270047	A2	19891027	JP 1988-99551	1988 0422
JP 01270048	A2	19891027	JP 1988-99552	1988 0422
PRIORITY APPLN. INFO.:			JP 1988-99551 A	1988 0422
			JP 1988-99552 A	1988 0422

AB A neg.-working photosensitive composition is described comprising: (1) ≥1 diazonium compound; (2) ≥1 **H2O-insol. aqueous alkaline** solution-**soluble** polymer; and (3) ≥1 compound with a thiol- and/or thioether group and an acid group in the mol., whosepka ≤14, and/or ≥1 compound with ≥1 thiol- and/or thioether group and an alc. OH and/or ether group in the mol. The material has improved developability in an aqueous alkaline solution The composition also eliminates background contamination in **lithog.** **plate** production

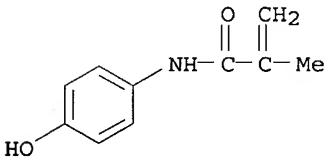
IT **77833-95-5 126858-18-2 127097-61-4 127097-62-5 127115-35-9**
RL: USES (Uses)
(photosensitive composition containing thiols and)

RN 77833-95-5 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, polymer with ethyl 2-propenoate, N-(4-hydroxyphenyl)-2-methyl-2-propenamide and 2-propenenitrile (9CI) (CA INDEX NAME)

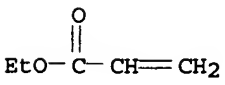
CM 1

CRN 19243-95-9
CMF C10 H11 N O2



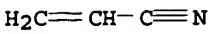
CM 2

CRN 140-88-5
CMF C5 H8 O2



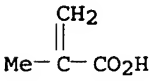
CM 3

CRN 107-13-1
CMF C3 H3 N



CM 4

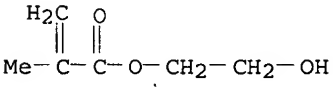
CRN 79-41-4
CMF C4 H6 O2



RN 126858-18-2 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, polymer with 2-hydroxyethyl 2-methyl-2-propenoate, methyl 2-methyl-2-propenoate, 2-propenenitrile and 1H-pyrrole-2,5-dione (9CI) (CA INDEX NAME)

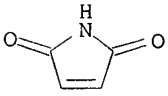
CM 1

CRN 868-77-9
CMF C6 H10 O3



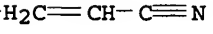
CM 2

CRN 541-59-3
CMF C4 H3 N O2



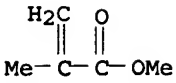
CM 3

CRN 107-13-1
CMF C3 H3 N



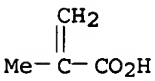
CM 4

CRN 80-62-6
CMF C5 H8 O2



CM 5

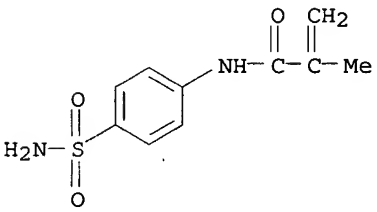
CRN 79-41-4
CMF C4 H6 O2



RN 127097-61-4 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, polymer with N-[4-(aminosulfonyl)phenyl]-2-methyl-2-propenamide, 2-hydroxyethyl 2-methyl-2-propenoate, methyl 2-methyl-2-propenoate and 2-propenenitrile (9CI) (CA INDEX NAME)

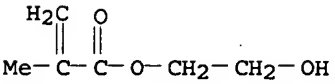
CM 1

CRN 56992-87-1
CMF C10 H12 N2 O3 S



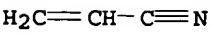
CM 2

CRN 868-77-9
CMF C6 H10 O3



CM 3

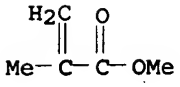
CRN 107-13-1
CMF C3 H3 N



CM 4

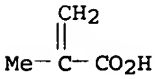
CRN 80-62-6

CMF C5 H8 O2



CM 5

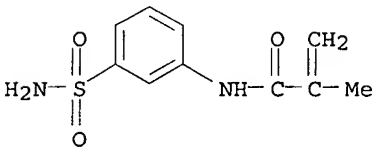
CRN 79-41-4
CMF C4 H6 O2



RN 127097-62-5 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, polymer with N-[3-(aminosulfonyl)phenyl]-2-methyl-2-propenamide, ethyl 2-methyl-2-propenoate and 2-propenenitrile (9CI) (CA INDEX NAME)

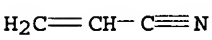
CM 1

CRN 125026-41-7
CMF C10 H12 N2 O3 S



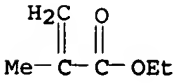
CM 2

CRN 107-13-1
CMF C3 H3 N



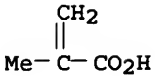
CM 3

CRN 97-63-2
CMF C6 H10 O2



CM 4

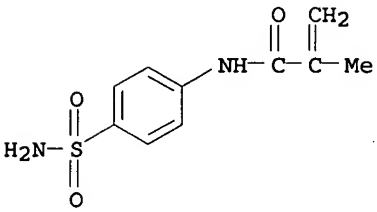
CRN 79-41-4
CMF C4 H6 O2



RN 127115-35-9 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, polymer with N-[4-(aminosulfonyl)phenyl]-2-methyl-2-propenamide, ethyl 2-propenoate and 2-propenenitrile (9CI) (CA INDEX NAME)

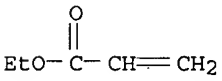
CM 1

CRN 56992-87-1
CMF C10 H12 N2 O3 S



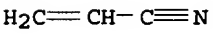
CM 2

CRN 140-88-5
CMF C5 H8 O2



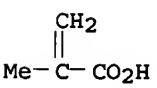
CM 3

CRN 107-13-1
CMF C3 H3 N



CM 4

CRN 79-41-4
CMF C4 H6 O2



IC ICM G03F007-08
ICS G03F007-02
ICA H05K003-06
ICI C08K005-36, C08K005-23, C08L025-18, C08L033-00, C08L035-00,

C08L059-00, C08L061-06, C08L063-00, C08L075-04
CC 74-6 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
ST **lithog plate** photosensitive compn; thiol acid thioether photosensitive compn
IT **Lithographic plates**
(photosensitive composition containing thiol and thioether compds. for fabrication of)
IT **77833-95-5** 96317-20-3 **126858-18-2** **127097-61-4** **127097-62-5** **127115-35-9**
RL: USES (Uses)
(photosensitive composition containing thiols and)

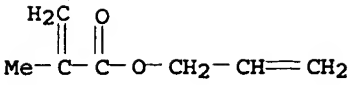
L64 ANSWER 18 OF 21 HCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 1987:544920 HCAPLUS
DOCUMENT NUMBER: 107:144920
TITLE: Photosensitive resin compositions for **lithographic** presensitized **plates**
INVENTOR(S): Koike, Mitsuru; Imai, Masanori; Azuma, Tatsuji; Kita, Nobuyuki
PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 8 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 62052548	A2	19870307	JP 1985-193395	1985 0902
PRIORITY APPLN. INFO.:			JP 1985-193395	1985 0902

AB The title photosensitive compns. contain (1) ethylenically unsatd. monomers, (2) **alkaline** solution-**soluble** (or swellable) film-forming polymers, (3) photoinitiators, (4) solid (at room temperature) higher fatty acids (or their amides), and (5) optically transparent **water-insol.** particles whose average particle size and n are ≤500 μ and 1.3-1.7, resp. The preferred content of the particles is 0.1-50 weight%. The photosensitive compns. are especially useful in preparing presensitized **lithog. plates.** The photosensitive compns. show good adhesion with synthetic paper supports and give high-quality **lithog. plates.**
IT **90216-38-9**, Allyl methacrylate-methacrylic acid copolymer
RL: USES (Uses)
(photosensitive resin compns. containing, for presensitized **lithog. plates**)
RN 90216-38-9 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, polymer with 2-propenyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

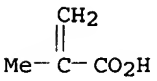
CM 1

CRN 96-05-9
CMF C7 H10 O2



CM 2

CRN 79-41-4
CMF C4 H6 O2



IC ICM G03C001-68
ICS G03C001-00; G03F007-10
CC 74-6 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
ST photosensitive resin compn presensitized plate; **lithog plate** presensitized photosensitive resin
IT **Lithographic plates**
(presensitized, photosensitive resin compns. containing insol. particles for preparation of)
IT 112-85-6, Behenic acid 1328-54-7, Oil Blue 603 3061-75-4, Behenamide 7631-86-9, Silicon dioxide, uses and miscellaneous 15625-89-5, Trimethylolpropane triacrylate 69432-40-2 72015-26-0 73539-59-0 **90216-38-9**, Allyl methacrylate-methacrylic acid copolymer
RL: USES (Uses)
(photosensitive resin compns. containing, for presensitized **lithog. plates**)

L64 ANSWER 19 OF 21 HCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 1986:635833 HCAPLUS
DOCUMENT NUMBER: 105:235833
TITLE: Radiation-sensitive mixture, recording material produced from it, and production of heat-resistant relief recordings
INVENTOR(S): Schneller, Arnold; Geissler, Ulrich
PATENT ASSIGNEE(S): Hoechst A.-G. , Fed. Rep. Ger.
SOURCE: Ger. Offen., 30 pp.
CODEN: GWXXBX
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 3442756	A1	19860528	DE 1984-3442756	1984 1123
EP 184044	A2	19860611	EP 1985-114454	1985 1114
EP 184044	A3	19880113		
EP 184044	B1	19920115		
R: AT, BE, CH, DE, FR, GB, IT, LI, NL, SE				
AT 71747	E	19920215	AT 1985-114454	1985 1114

JP 61143747	A2	19860701	JP 1985-261633	1985 1122
JP 05088834	B4	19931224		
US 4699867	A	19871013	US 1985-800965	1985 1122
PRIORITY APPLN. INFO.:			DE 1984-3442756 A	1984 1123
			EP 1985-114454 A	1985 1114

AB Pos.-working radiation-sensitive compns. are described for the production of relief images or resists of high resolution, good thermal stability, and resistance to solvents, etching solns., and galvanizing baths and that contain no components that upon heating give volatile products that deteriorate the image background. The compns. contain a **water-insol., aqueous alkaline** solution-**soluble** polymer binder and a 1,2-quinonediazide or a combination of a compound forming a strong acid upon exposure to actinic radiation and a compound having a cleavable COC bond whose solution in a liquid developer is increased by the effects of an acid. Thus, a photoresist composition containing an N-butoxymethylmethacrylamide-4-hydroxystyrene-styrene copolymer 8.9, 2,3,4-trihydroxybenzophenone tris(1,2-naphthoquinone-2-diazide-5-sulfonate) 1.1, butanone 45, and EtOH 45 parts was coated on a Si wafer, dried, imagewise exposed through a test mask, developed in an aqueous alkaline solution, and tempered to give a layer having outstanding resistance to heat and aggressive materials, such as HF plasma.

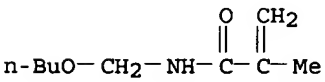
IT **105596-69-8**
RL: USES (Uses)
(photosensitive composition containing, pos.-working, for **lithog**
. **plates** with improved heat resistance)

RN 105596-69-8 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, polymer with N-(butoxymethyl)-2-methyl-2-propenamide and ethenylbenzene (9CI) (CA INDEX NAME)

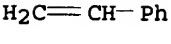
CM 1

CRN 5153-77-5
CMF C9 H17 N O2



CM 2

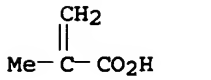
CRN 100-42-5
CMF C8 H8



CM 3

CRN 79-41-4

CMF C4 H6 O2



IC ICM G03F007-08
ICS G03C001-52
CC 74-5 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
IT **Lithographic plates**
(photosensitive compns. for fabrication of, pos.-working, with improved heat resistance)
IT 467-63-0 69666-55-3 97802-84-1 105596-66-5 105596-67-6 **105596-69-8**
RL: USES (Uses)
(photosensitive composition containing, pos.-working, for **lithog. plates** with improved heat resistance)
IT 5610-94-6 9016-83-5
RL: USES (Uses)
(photosensitive compns. containing, pos.-working, for heat-resistant photoresists and **lithog. plates**)

L64 ANSWER 20 OF 21 HCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 1986:120049 HCAPLUS
DOCUMENT NUMBER: 104:120049
TITLE: Napthoquinone diazide sulfonic acid esters and light-sensitive compositions containing them
INVENTOR(S): Buhr, Gerhard; Ruckert, Hans; Stahlhofen, Paul
PATENT ASSIGNEE(S): Hoechst A.-G. , Fed. Rep. Ger.
SOURCE: Pat. Specif. (Aust.), 27 pp.
CODEN: ALXXAP
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

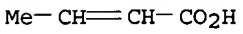
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
AU 543462	B2	19850418	AU 1981-76752	1981 1023
AU 8176752	A1	19820429		
PRIORITY APPLN. INFO.:			AU 1981-76752	1981 1023

AB A pos.-working photosensitive composition suitable for preparation of printing plates and photoresists contains a **H2O-insol.** binder which is **soluble** or swells in aqueous-**alkaline** solns., and a 1,2-naphthoquinone-2-diazidosulfonic acid ester of a dihydroxyarylophenone or of a dihydroxybenzoic acid. Thus, a grained and anodized Al foil was coated with a solution containing cresol-HCOH novolak resin 6.3, 2,4-bis(1,2-naphthoquinone-2-diazido-5-sulfonyl)phenyl Bu ketone 1.2, Crystal Violet base 0.07, 1,2-naphthoquinone-2-diazide-4-sulfonic acid chloride 0.17, a maleate resin 0.25, ethylene glycol monomethyl ether Bu acetate 3:2 mixture 92.01 weight parts, dried to give 2.5 g/m2 layer, imagewise exposed for 60 s under 5 kW metal halide lamp, developed with an aqueous solution containing Na metasilicate, Na3PO4, NaH2PO4 to provide a printing plate which provided 150,000 prints of excellent quality.

IT **25609-89-6 38719-16-3**
RL: USES (Uses)
(photoimaging composition for printing plates and photoresists fabrication containing naphthoquinonediazidosulfonic acid ester of dihydroxyacylophenone or dihydroxybenzoic acid and)
RN 25609-89-6 HCAPLUS
CN 2-Butenoic acid, polymer with ethenyl acetate (9CI) (CA INDEX NAME)

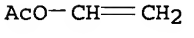
CM 1

CRN 3724-65-0
CMF C4 H6 O2



CM 2

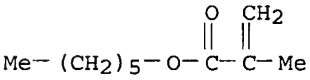
CRN 108-05-4
CMF C4 H6 O2



RN 38719-16-3 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, polymer with hexyl 2-methyl-2-propenoate and methyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

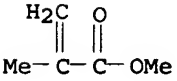
CM 1

CRN 142-09-6
CMF C10 H18 O2



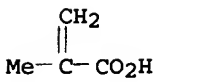
CM 2

CRN 80-62-6
CMF C5 H8 O2



CM 3

CRN 79-41-4
CMF C4 H6 O2



IC C07C161-06; G03C001-56
CC 74-6 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
IT **Lithographic plates**
(photosensitive composition for fabrication of, containing naphthoquinonediazidesulfonic acid ester)
IT 9003-32-1 9016-83-5 17354-14-2 **25609-89-6**
36451-09-9 **38719-16-3**
RL: USES (Uses)
(photoimaging composition for printing plates and photoresists fabrication containing naphthoquinonediazidosulfonic acid ester of dihydroxyacylophenone or dihydroxybenzoic acid and)

L64 ANSWER 21 OF 21 HCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 1983:63322 HCAPLUS
DOCUMENT NUMBER: 98:63322
TITLE: Photosensitive resin compositions for presensitized plates
PATENT ASSIGNEE(S): Ricoh Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 9 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 57063526	A2	19820417	JP 1980-138267	1980 1004
PRIORITY APPLN. INFO.:			JP 1980-138267	1980 1004

GI

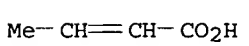
* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

AB Photosensitive resin compns. contain a **water-insol.** resin, which is **soluble** in an **alkaline** solution or swells in an alkaline solution, and a 1,2-naphthoquinone-2-diazidesulfonic acid ester selected from I, II, III, IV, and V [R = 1,2-naphthoquinone-2-azidesulfonyl; R1, R2 = H, halo, C1-8 alkyl, alkoxy; R3, R4 = H, C1-10 alkyl, alkoxy, halo; R5, R6 = H, C1-10 alkyl; Z = CR7(CH2)xCO2(CH2)yO2C(CH2)xCR7, VI, VII; Z1 = CR8R9; Z2 = phenylene, naphthylene; Z3 = S, SO, CR8R9; Z4 = O(CH2)z, NH; Z5 = C, S, SO, H, alkylene; R7, R8, R9 = H, C1-4 alkyl; n = 3, 4; m = 1, 2, 4; x = 0-4; y = 2, 4, 6, 8, 10, 12, 14, 16; z = 0-20]. Thus, I (R = 1,2-naphthoquinone-2-azide-5-sulfonyl; R1 = H; R2 = Me at m-position with respect to Z group; Z = CMeCH2CO2CH2CH2O2CCH2CMe; n = 4) 10, a cresol novolak resin 35, methyl violet 0.05, and MeOCH2CH2OH 50 parts were mixed and coated on an Al support to give a presensitized **plate**, from which a **lithog. plate** having excellent

durability was prepared
IT **25609-89-6**
RL: USES (Uses)
(photosensitive resin compns. containing, for presensitized plates)
RN 25609-89-6 HCAPLUS
CN 2-Butenoic acid, polymer with ethenyl acetate (9CI) (CA INDEX NAME)

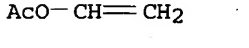
CM 1

CRN 3724-65-0
CMF C4 H6 O2



CM 2

CRN 108-05-4
CMF C4 H6 O2



IC G03C001-52; G03C001-72; G03F007-08
CC 74-4 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
IT **Lithographic plates**
(presensitized, photosensitive resin compns. for, naphthoquinonediazidesulfonate esters for)
IT 8004-87-3 9016-83-5 17354-14-2 **25609-89-6**
84242-38-6 84242-39-7 84242-40-0 84242-41-1 84242-42-2
84242-43-3 84242-44-4 84242-45-5 84242-46-6 84242-47-7
84242-48-8 84242-49-9
RL: USES (Uses)
(photosensitive resin compns. containing, for presensitized plates)

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